

Introduction – Focus on Medication Safety

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The Canadian healthcare system continues to undergo significant change as it tries to cope with increasing demand and cost in an environment of limited financial resources. Every part of the system has to do more with less, look a different ways of doing things, eliminate non-value-added interventions, increase efficiency and find new ways to reduce costs. With the limited supply of health professionals expected to become more acute over the next few years, it is expected that salary expectations will continue to rise, putting additional strain on the system. Advances in technology may improve efficiency and safety, but could require a reduction in operating dollars to support the additional capital expenditures required. The new federal funds expected to flow into the provincial health systems will likely be focused on underserved populations and access issues, including wait times. Although the Canadian public continues to regard healthcare as a key priority, confidence in the current system is eroded by reports of cancelled surgeries and serious medical errors.

Patient safety is a topic of increased focus to practitioners in the Canadian healthcare system. The landmark 'Canadian Adverse Events Study' by Baker and Norton published in May 2004 highlighted the need to improve the safety of our patient care systems.⁽¹⁾ The overall adverse events rate of 7.5 per 100 hospital admissions, with 37% of these events potentially preventable, challenges all health leaders to invest more resources and attention in systems that will reduce patient harm. The fact that drug or fluid related events were the second leading cause of adverse events in Canadian hospitals highlights the need for pharmacists to expand their traditional role and work with other health professionals to improve safety.

This year's Report focuses on medication safety and the role of pharmacy leaders in creating a safer environment for patients. A specific chapter addresses medication safety and strategies related to adverse drug events; however safety issues and challenges are identified within various sections of the Report. For more than 30 years pharmacists have been advocates for improvements in systems that improve safety. With the enhanced focus on patient safety, it is expected that pharmacy leaders will play an increasingly important role.

Patricia Lefebvre's review of medication safety issues highlights the changes in incident reporting and medication incident reduction strategies. Two-thirds of respondents indicated that strategies have been implemented to increase the reporting of medication incidents, while 77% of teaching hospitals have implemented strategies to monitor the occurrence of adverse drug events. Patricia outlines the leadership role of pharmacists in error reduction and the need for continued research in patient safety.

Effective drug distribution systems can reduce the rate of occurrence of medication errors. Janet Harding reviews these systems and notes that patient safety can be severely compromised if flaws in the design of drug distribution systems create opportunities for increased error. She argues that "it is fundamental that pharmacists advocate for and ultimately deliver drug distribution systems that are the least prone to error." Despite the evidence, respondents reported that comprehensive unit dose systems are in place at only 31% of institutions and that complete intravenous admixture services are in use at 56% of facilities.

Neil Johnson's review of human resources highlights the effect that pharmacist shortages have on practice. Respondents reported more than 330 vacant positions and approximately two thirds of respondents indicated that services have been curtailed in the past year due to staff shortages. Pharmacist salaries have been impacted by the demand – the average of reported maximum salary for the category "Pharmacist (B. Sc.);" increased by more than 14% since the last survey. Based on information collected this year and in previous reports, the skill shortage is unlikely to dissipate in the near future, further compromising the ability of hospital pharmacies to deliver comprehensive, high quality, patient-oriented pharmacy services.

Patricia Macgregor reports on the application of technological innovations, noting that “judicious application of new technologies is reported as one of the strategies to optimize patient care and improve outcomes, communication and efficiency.” Only 22% of respondents to the survey indicated that bar coding is used in their medication systems, and use of computerized physician order entry systems was reported by only 5% of respondents. Efforts to improve patient safety must include appropriate investments in technology to be effective.

Jean-Francois Bussieres profiles clinical pharmacy services in 2003/04 with respect to human resources, documentation of clinical activities, practice models, evaluation of services, the right to prescribe and the priority and service level of clinical pharmacy services. Significant changes in clinical practice are described, including pharmacist prescribing.

Nancy Roberts has reviewed a number of topics – drug utilization review, drug purchasing and inventory control, education and research. Drug costs have increased by more than 19%, a rate that clearly exceeds growth in other areas of health care.

As in previous Reports, Kevin Hall has developed benchmark indicators for Pharmacy departments in Canada. He has analyzed data from large acute and specialty hospitals and used subset analyses to allow for inter-facility comparison. This year Kevin includes an informative review of pediatric facilities in Canada.

The Editorial Board has made a number of changes in this Report based on reader input. A completed set of tables and figures are included, but the written section has been modified by using a bullet format to highlight changes and provide commentary.

I would like to take this opportunity to thank a number of individuals who have contributed to the success of this survey and Report. The support of Eli Lilly Canada and the contributions of Ken Forsyth, Donna Hammill, Anne Hiltz and other members of the Eli Lilly Canada team, have made this publication possible over the past 15 years. The Editorial Board members continue to meet on a regular basis to identify trends, share information and analyze changes in practice - their continued support for this project is appreciated by all practitioners. Paul Oeltjen collects and analyzes the data for the editors, Marjorie Robertson provides structure and George Horne electronically publishes the results – without their contributions the Report would not be possible. Lastly Bonnie Salsman provided not only editorial support but provided leadership and direction when it was needed over the past year. This team assures the quality of the Hospital Pharmacy in Canada Annual Report and Millcroft, the Symposium.

References

1. Baker G.R. Norton P.G and al. The Canadian Adverse Events Study: the incidence of adverse events among hospitalized patients in Canada. CMAJ. 2004;170 (11): 1678-86.