

Hospital Pharmacy in Canada Annual Report for 2005/2006: Special Interest Section on Mental Health

Every 2 years, the Hospital Pharmacy in Canada Survey collects information about hospital pharmacy practice in Canada. In the past, the survey was distributed only to so-called acute care hospitals (i.e., hospitals with at least 50 acute care beds and at least 100 beds in total); mental health facilities, long-term care facilities, and other non-acute care hospitals were excluded. In the most recent survey, which covered the 2005/2006 fiscal year, however, we collected data from hospitals that specialize in the care of patients receiving mental health services. Those data were analyzed separately from the data provided by the 142 acute care hospitals that also participated in the 2005/2006 survey. This letter summarizes some of the key findings from the analysis of data submitted by 10 Canadian mental health hospitals. Additional information can be found in the full chapter on the mental health survey data within the 2005/2006 Hospital Pharmacy in Canada report.¹

Among hospitals responding to the survey, the pharmacy department was open for an average of 47 h per week in the mental health hospitals and an average of 79 h per week in the acute care hospitals. The participating mental health facilities had, on average, a budget for 0.30 h of pharmacy staff time per patient-day. A similar figure of 0.34 budgeted pharmacy hours per acute patient-day was calculated for mental health programs operating within acute care hospitals.² In contrast, the average was 0.81 budgeted pharmacy hours per patient-day for the acute care hospitals participating in the survey. The lower number of budgeted pharmacy hours in mental health hospitals may suggest that the care of the mental health population consumes less pharmacy staff time per patient-day than does the care of acute medical-surgical patients. However, other factors, such as fewer daily hours of pharmacy operations and higher use of traditional drug distribution systems, may also contribute to the lower pharmacy staffing levels in mental health facilities.

The average reported percentages of inpatient beds serviced with the pharmaceutical care model, the traditional clinical pharmacy model, or no clinical service at all were very similar for mental health and acute care hospital respondents. However, 70% (7/10) of the mental health respondents reported the provision of clinical pharmacy services to mental health outpatients, whereas only 27% (30/110) of the acute care hospitals with outpatient mental health programs reported doing so. Obtaining drug histories on admission and participating in medical rounds—clinical pharmacy services identified by Bond and Raehl³ as having a positive effect on health outcomes and reducing adverse effects—received a higher priority ranking by mental health hospitals than by

acute care hospitals. Other clinical services receiving a higher ranking from mental health respondents were medication counselling and patient education programs.

The establishment of a policy for seamless care, identified as a required organizational practice by the Canadian Council on Health Facilities Accreditation, was reported to be in place for only 20% (2/10) of the mental health respondents, compared to 37% (53/142) of acute care hospitals. This difference may be related to a higher proportion of patients receiving long-term care in mental health facilities.

Medication order entry in mental health hospitals was reported to be performed primarily by pharmacists and technicians, as is the case for acute care hospitals. However, the percentage of pharmacist-entered orders that were verified by another pharmacist was much higher in mental health hospitals (67% [6/9]) than in acute care hospitals (34% [43/126]).

One-third (3/9) of the mental health hospitals reported the use of manually prepared medication tickets for at least 90% of beds, but only 8% (12/142) of acute care hospitals reported this practice. The high use of medication tickets among mental health facilities is cause for concern. The manual production of tickets or cards places the patient at risk from transcription errors, and the large quantity and small size of medication tickets predisposes the tickets to be easily lost or misplaced.

The average drug cost per patient-day for mental health hospitals was \$16.00. However, because of the small number of hospitals providing this information ($n = 7$), caution should be applied when using this value for benchmarking or comparison purposes. For mental health programs operating within an acute care hospital, the mean reported drug cost per patient-day was substantially lower, at \$11.27.²

Seventy percent (7/10) of the mental health hospitals, but only 46% (63/142) of the acute care hospitals, reported that medication orders remained conditional until reviewed by a pharmacist at least 90% of the time. This is a noteworthy difference, considering the significantly shorter hours of pharmacy operation per day reported by the mental health hospitals. However, in the mental health practice setting, it is likely that fewer new medication orders are written during evenings, nights, and weekends, when the pharmacy is closed. It is also likely that fewer new medications would need to be started immediately, relative to the situation in acute care hospitals.

The majority of results in the medication safety section were similar for the mental health hospitals and the acute care hospitals, except for the following: 77% (7/9) of respondents from mental health facilities (including those who answered “yes” or “partial”) indicated that incidents occurring during drug prescribing and detected in the pharmacy before dispensing would be reported, compared to 46% (62/136) for acute care hospitals.

Pharmacy information systems, combined with automation technologies, offer substantial opportunities for improving the safety and efficiency of the medication system. Results from the 2005/2006 Hospital Pharmacy in Canada Survey indicate that acute care hospitals are only slowly beginning to embrace this change. One area where mental health institutions appear to be leading the way is computerized prescriber order entry: 40% (4/10) of respondents from mental health hospitals but only 23% (33/142) of those from acute care hospitals reported an approved plan to implement such a system. However, this result should be interpreted cautiously, given the small number of respondents from mental health facilities.

In terms of education and research, the most noteworthy observation was that respondents from mental health hospitals reported significantly more time committed to supporting the training of pharmacy technicians (an average of 220 days per facility for the 2005/2006 year) than did acute care hospitals (an average of 98 days per facility).

In summary, the mental health section of the Hospital Pharmacy in Canada Survey for 2005/2006 identified some interesting differences in pharmacy operations between mental health hospitals and acute care hospitals. It is hoped that this information will assist hospital pharmacists who are practising in mental health institutions in their efforts to provide leadership in areas such as evidence-based clinical pharmacy practices and improved drug distribution systems.

References

1. Roberts N. Mental health hospitals. In: Babich M, Hall KW, Johnson N, Macgregor P, Roberts N, Bussi eres JF, et al., editors. *2005/06 annual report—hospital pharmacy in Canada*. Eli Lilly; 2007 [cited 2008 Feb 26]. p. 101-106. Available from: http://www.lillyhospitalsurvey.ca/HPC2/Content/2006_report/mentalhospitals.pdf
2. Hall K. Pharmacy staffing and drug costs for specific clinical programs and pharmacy services — acute care. In: Babich M, Hall KW, Johnson N, Macgregor P, Roberts N, Bussi eres JF, et al., editors. *2005/06 annual report—hospital pharmacy in Canada*. Eli Lilly; 2007 [cited 2008 Feb 26]. p. 93-98. Available from: http://www.lillyhospitalsurvey.ca/hpc2/Content/2006_report/staffingacute.pdf
3. Bond CA, Raehl CL. Clinical pharmacy services, pharmacy staffing, and adverse drug reactions in US hospitals. *Pharmacotherapy* 2006;26(6):735-747.

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