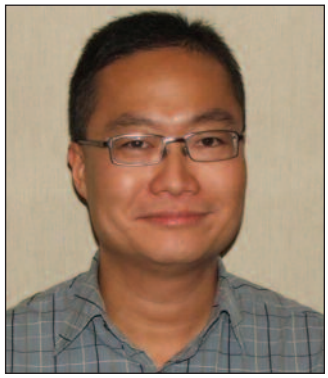
"Partners in Crime": Pharmacists and Pharmacy Technicians

Clarence Chant

Despite the established roles of pharmacists as members of health care teams within hospitals and in communities, there is a significant shortage of pharmacists to fulfill these roles. In the United States, the magnitude of the shortage of hospital pharmacists was modelled with various databases of clinical pharmacy services and staffing.[1] The model indicated that implementing a core set of 5 clinical pharmacy services that have been associated with improvements in patients' outcomes (i.e., providing drug information, managing adverse drug reactions, attending rounds, managing drug protocols, and obtaining medication histories) for 100% of inpatients by the year 2020 would require 14 508 additional full-time equivalent pharmacist positions! Although similar modelling has not been reported from Canada, the recent federally funded report Moving Forward: Pharmacy Human Resources for the Future seems to echo the US shortage.[2] In the face of such workforce shortages, and given the continually expanding roles of pharmacists as providers of patient care, the use of pharmacy technicians to support pharmacists by performing selected clinical duties has been advocated as a potential, if only partial, solution.

In this issue of the Journal, Johnston and others[3] report a randomized controlled trial comparing best possible medication histories obtained in the emergency department by pharmacists and by pharmacy technicians.[3] In their study, Johnston and coauthors found that trained pharmacy technicians were just as effective as pharmacists in obtaining medication histories in the emergency department of a community hospital and that the numbers of discrepancies identified during the subsequent medication reconciliation process for randomly selected patients were similar. Furthermore, these discrepancies were similar in severity, as adjudicated by a third-party reviewer. The study was underpowered, with only 59 patients, and for the majority of patients, there were no unintentional medication discrepancies (47 patients as determined by pharmacists, 50 patients as determined by technicians). Nonetheless, this study adds to a growing body of literature supporting the role of pharmacy technicians in this aspect of the medication reconciliation process.[4,5]



To push the proverbial envelope even further, the "Point Counterpoint" column in this issue of the Journal presents a debate on the further extension of the clinical role of pharmacy technicians in areas where there are no pharmacists at all.[6,7] Both sides of the argument appear logical and compelling, and the authors raise many pertinent issues. On the "pro" side,[6] extension of the technician's role is supported by workforce optimization, technician competencies, and current evidence (including the trial of Johnston and others[3]). On the "con" side,[7] lack of collaboration, negative perceptions on the part of stakeholders, regulatory concerns, and the lack of optimization of technicians' roles even within dispensing domains are all cited as reasons for caution.

The use of clinical pharmacy technicians in hospitals is certainly not new. Previous reports have described clinical technicians performing activities that go well beyond obtaining medication histories, including interviewing, counselling, and documenting interactions with patients in an anticoagulation clinic, all under the oversight of a pharmacist.[8] This approach is in direct contrast to the role of technicians in some hospitals, where they neither dispense medications without a pharmacist check nor enter any prescriptions, a far cry from the usual duties of their counterparts in community drug stores.

In my opinion, the issue facing the profession of pharmacy is not whether we should work collaboratively with technicians in order to optimize pharmaceutical care for our patients, but how we should best collaborate to yield the greatest benefits to patients while minimizing the risks.[9] Other health care professions such as nursing and medicine have already, albeit to different extents, embraced the concept of intraprofessional collaboration with support personnel to

improve patient care, and the profession of pharmacy should be no different. In fact, the Pharmacy Examining Board of Canada already offers a national examination process for technicians. Furthermore, at least in Ontario, the provincial college of pharmacists has developed proposed standards of practice for registered pharmacy technicians. These standards include taking medication histories, because that is part of the training curriculum for technicians.[10] Admittedly, the evidence for the added value of the clinical technician is still preliminary (which, I might add, is also true of some pharmacists' activities), but that should not deter us from having this conversation within all of our hospital pharmacy departments.

It is not the strongest of the species that survives, nor the most intelligent; it is the one that is most adaptable to change.
—Charles Robert Darwin

References

1. Bond CA, Raehl CL, Patry R. Evidence-based core clinical pharmacy services in United States hospitals in 2020: services and staffing. *Pharmacotherapy* 2004;24(4):427–440.
2. Management Committee. *Moving forward: pharmacy human resources for the future.* Final report. Ottawa (ON): Canadian Pharmacists Association; 2008 Sep [cited 2010 Jul 14]. Available from: www.pharmacyhr.ca/Articles/Eng/130.pdf
3. Johnston RM, Saulnier L, Gould O. Obtaining the best possible medication history in the emergency department: comparison between pharmacy technicians and pharmacists. *Can J Hosp Pharm* 2010;63(5):359-366.
4. Leung M, Jung J, Lau W, Kiaii M, Jung B. Best possible medication history for hemodialysis patients obtained by a pharmacy technician. *Can J Hosp Pharm* 2009;62(5):386-391.
5. Remtulla S, Brown G, Frighetto L. Best possible medication history by a pharmacy technician at a tertiary care hospital. *Can J Hosp Pharm* 2009;62(5):402-405.
6. Horon K, Hennessey T. Should pharmacy technicians provide clinical services or perform patient care activities in areas without a pharmacist? The "pro" side. *Can J Hosp Pharm* 2010;63(5):392-393.
7. Gorman S, Heukshorst S. Should pharmacy technicians provide clinical services or perform patient care activities in areas without a pharmacist? The "con" side. *Can J Hosp Pharm* 2010;63(5):393-395.
8. Weber E, Hepfinger C, Koontz R, Cohn-Oswald L. Pharmacy technicians supporting clinical functions. *Am J Health Syst Pharm* 2005;62(23): 2466-2472.
9. Patel A, Ross B. Walgreens told to pay $25.8 million over teen pharmacy tech's error; mother of three got pills ten times prescribed strength, resulting in massive stroke. *ABC News: The Blotter*; 2010 Mar 1 [cited 2010 Jul 14]. Available from: http://abcnews.go.com/Blotter/walgreens-told-pay-285-mil-teen-pharmacy-techs/story?id=9977262
10. Ontario College of Pharmacists, Pharmacy Technician Working Group. Proposed standards of practice for registered pharmacy technicians. Toronto (ON): Ontario College of Pharmacists; [cited 2010 Jul 14]. www.ocpinfo.com/client/ocp/OCPHome.nsf/web/Proposed+Technician+Standards

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ON THE FRONT COVER

Lac Le Jeune, British Columbia

Ken Wou had just completed a photography course taught by world-reknowned photograher Darwin Wiggett and was eager to put his new knowledge into practice. Very early the next day, Thanksgiving Monday, he ventured out to Lac Le Jeune, near Kamloops, British Columbia. Using a Canon Digital XSi camera with a 20- to 35-mm lens, he captured this frosty dock as the fog was lifting and the lake was beginning to freeze.

The *CJHP* would be pleased to consider photographs featuring Canadian scenery taken by CSHP members for use on the front cover of the journal. If you would like to submit a photograph, please send an electronic copy (minimum resolution 300 dpi) to Colleen Drake at cdrake@cshp.ca.