Practice Spotlight: Dawn Dalen

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It’s 9 AM on a Thursday morning at Kelowna General Hospital. The emergency pharmacist enters the Emergency Department, which is bursting at the seams. There are patients in the hallways, the trauma bays are full, and there is a long list of patients requiring assessment by a pharmacist. This scenario is not unique to the Kelowna General Hospital: it is played out every day in emergency departments across the country.

The provision of clinical pharmacy services in the emergency department was first reported in 1977, but economic constraints have generally precluded emergency departments from having their own dedicated clinical pharmacists. In a recent Canadian prospective observational study, 12.0% (95% confidence interval [CI] 10.1%—14.2%) of emergency department visits were drug-related, and 68.0% of these visits (95% CI 59.0%–76.2%) were deemed preventable. Furthermore, patients visiting the emergency department because of drug-related problems were more likely to be admitted to hospital and had a longer length of stay than those visiting the emergency department for nondrug reasons. In an economic analysis conducted at one of the larger emergency departments in the United States, between $4.68 and $16.70 was saved for every dollar spent on a pharmacist. Therefore, because of the enormous economic burden associated with adverse drug events, it may be highly cost-effective to use the high-level expertise of a clinical pharmacist in the emergency department.

The Kelowna General Hospital is a 344-bed tertiary care facility serving about 300,000 people in the Okanagan Valley. It is a trauma and referral hospital for the Interior of British Columbia. The Emergency Department is a 23-bed unit, with 2 trauma rooms and a seclusion room. The department serves about 54,000 patients per year, which makes it the busiest emergency department in the BC Interior. With recent regional restructuring, the number of patients with high acuity scores seen in the emergency department has increased by 225% over the past 5 years. In response to this growth, a new Emergency Department with 46 beds is due to replace the current department in 2012.

Dawn Dalen began working in the Kelowna General Hospital Emergency Department in 2005, after completing her PharmD at the University of British Columbia. It was the first time a clinical pharmacist had been dedicated to the department, despite requests for such a position over several years. Before she started in the department, Dr Dalen met with the key emergency physicians and allied health care professionals to discuss the role of the emergency pharmacist and also to obtain their input on how a clinical pharmacist could be integrated into the department.

The clinical pharmacist works Monday to Friday and is responsible for providing care to all patients in the Emergency Department, both those who have been admitted and are being boarded in the department and those who are being treated as outpatients. Pharmaceutical care in the emergency setting presents unique challenges not seen in other areas of the hospital, given the high patient volume, rapid turnover, and diversity of cases. The patient’s history is often not completed before the pharmacist does her assessment; furthermore, such histories may be difficult to obtain in the Emergency Department because of the clinical situation. The Emergency Department is an area at especially high risk for medication errors, since common safety mechanisms used elsewhere in the hospital are not available, including prospective medication order review, and preparation and dispensing of medications in the pharmacy. Medication orders are often given verbally, and the drugs are prepared and administered to the patient right at the point of care. The clinical pharmacist is constantly prioritizing who to spend time with, trying to focus on patients with chronic conditions who are taking many medications, a situation in which pharmacists are known to have an impact on outcomes. Patients needing assessment by the clinical pharmacist are identified by chief complaint, acuity, complicated or unique pharmacotherapy, and/or referral from another health care professional. In addition, the pharmacist assists with drug therapy for advanced cardiac life support and with management of drug therapy during medical emergencies. Patients with acute venous thromboembolism return to the
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