Should Clinical Pharmacist Resources Be Equally Distributed across an Institution to Ensure a Consistent Level of Clinical Service for All Patients?

THE "PRO" SIDE

To be a valued member of the team, no matter where the team is working, a pharmacist must be consistently and reliably present, doing things for patients that no one else can do as well.

The clinical pharmacy model established by my predecessors at Kingston General Hospital, Mike Tierney and Ron Koob, is based on 2 premises: that all patients admitted to hospital need monitoring of drug therapy by a pharmacist and that all pharmacists must provide clinical pharmacy services for a defined group of patients. Much like the situation for nursing or physician services, the needs of patients determine the level of professional service provided, not the other way around.

Twenty years after the establishment of clinical pharmacy services at Kingston General, the demands on our pharmacists go well beyond what we can reasonably provide with available resources. These demands are related to a much more intensive model of direct patient care (i.e., pharmaceutical care), increasing patient volume, reduced length of stay, increased cost and complexity of drug therapy, and increased emphasis on providing education and research services. To top it off, we were faced with a 30% vacancy rate in pharmacists positions in 2004. The dilemma we faced was that we could no longer provide even a basic level of clinical pharmacy service to some patients if we were to continue providing such services to certain other patients.

Our pharmacy practice team, under the leadership of Véronique Briggs, reviewed the practice standards of the Ontario College of Pharmacists and the CSHP and defined pharmacist responsibilities and scope of practice as follows:

- Pharmacists apply specialized knowledge and skills to identify and resolve drug-related problems, reduce or avoid patient risk, and improve drug therapy outcomes.
- Pharmacists educate patients, staff, students, and community care providers about optimal use of drugs.
- Pharmacists are responsible and accountable for drug therapy recommendations and outcomes.
- Pharmacists develop, promote, and implement evidencebased drug therapy protocols and practices.

Table 1. Intensity of Inpatient Acute Care Services Based on Characteristics of Drug Therapy

Intensity of Service	Type of Service	
High	Intensive care unit or step-down unit Treatment with medications having a narrow therapeutic index or medications causing serious side effects (e.g., chemotherapy)	
Medium	General care units (e.g., general surgery, general medicine, pediatrics)	
Low	Psychiatry, delivery (healthy newborn), or awaiting discharge to a long-term care facility	

- Pharmacists participate in clinical drug and pharmacy practice research.
- Pharmacists ensure that medications are selected, prepared, labelled, and dispensed safely and efficiently through supervision of pharmacy technicians and through a systems approach to improving medication safety.

Because of staff shortages, we could not meet these responsibilities in any one area without compromising service in another area.

The Eli Lilly hospital pharmacy benchmarking survey of 2003/2004 divided inpatient acute care services into three levels of intensity based on various characteristics of drug therapy (Table 1). We applied these levels to patient care areas at Kingston General Hospital and adjusted our pharmacist allocation so that high-intensity areas received a relatively higher proportion of service per patient than medium- and low-intensity areas. In addition, we reduced the proportion of time that pharmacists spent on teaching and research activities to offset the necessary increase in time devoted to drug distribution (Table 2).

Each pharmacist has to determine his or her patient care priorities on the basis of a host of factors. Our goal is to meet or exceed the basic drug therapy needs of all inpatients at the hospital. We recognize that this situation is less than ideal, yet we believe that our service reflects the best possible compromise between patient needs and pharmacist resources. As essential health care providers, it is hard to justify why one-third of inpatients in Canadian hospitals receive no clinical pharmacy services at all. Would a similar situation be accepted by the public if the medical and nursing professions were forced to make such choices?



Table 2. Pharmacy Practice Components at Kingston General Hospital*

Practice Component	Type of Activity	% When Fully Staffed	% When Not Fully Staffed
Direct patient care	Programmatic, collaborative, patient-centred activities	40	40
Teaching	To pharmacy students, residents, peers To medical students, residents		
	Publications (e.g., manuals, handbooks)	15	10
Research and professional development	Collaborative and pharmacy practice projects Scholarly reviews and presentations	15	5
Drug distribution	Central drug-order review Supervision and support of technicians	30	45

^{*}Data represent percent of pharmacists' time.

John McBride, RPh, MSc Director, Pharmacy Services Kingston General Hospital Kingston, Ontario

Reference

 2003/2004 annual report. Hospital pharmacy in Canada. Eli Lilly; 2004 [cited 2007 Apr 5]. Available from: http://www.lillyhospital survey.ca/hpc2/content/2004_Report/2003_04_full.pdf

THE "CON" SIDE

At first glance, it is difficult to disagree with the suggestion that clinical pharmacist resources should be equally distributed across an institution, to allow a consistent level of service to all patients. However, the key word that makes this concept so unpalatable is "resources". In a perfect world, there would be adequate resources available, so that these clinical services, when spread equally across an institution, would encompass the full menu of services (e.g., pharmaceutical care) that our profession can offer. Unfortunately, this is not the reality in many Canadian hospitals. A combination of inadequate funding and a pharmacist shortage have forced many administrators who strive to provide a consistent level of service across their institutions to do so at the expense of the comprehensiveness of the service that is delivered. Here, I offer 4 reasons why, when faced with limited resources, we should offer comprehensive clinical pharmacist services to a limited group of patients, rather than providing consistent (but substandard) service across the entire institution.

Reason 1: Our Patients

A recent systematic review of the impact of clinical pharmacists in hospitals concluded that the following services improve patient outcomes: pharmacist participation on patient care rounds, interviewing patients to identify and solve drugrelated problems, medication reconciliation, discharge counselling, and postdischarge follow-up.¹ This list essentially defines comprehensive clinical pharmacy services, and the review suggested that outcomes will improve if these services are offered. Unfortunately, it is not known if it is more beneficial to an entire population if only 1 or 2 of these services are offered consistently across an institution, rather than offering all

of them to a limited number of patients. However, until this research has been done, we have no choice but to apply the literature as it exists, and that evidence supports the provision of comprehensive clinical pharmacist services.

Reason 2: Other Professions

Ours is not the only profession experiencing a demand for expertise that exceeds the supply. It is interesting to observe how other professions have responded to the human resources crisis. In areas where adequate nursing services cannot be maintained, hospital beds are closed and elective surgical procedures are cancelled. In communities where family physicians are scarce, most stop accepting new patients. In towns where specialists cannot be recruited, people must travel to access their care. These professions have chosen to continue offering comprehensive services, but to a limited group of patients. Imagine if, instead, nurses chose to check vital signs and give injections, but not change dressings. Imagine if family physicians responded by auscultating but refusing to palpate. Or if endocrinologists monitored glycemic control but had no time to check lipids. These scenarios are ridiculous and inconceivable, yet somehow our profession finds it acceptable to consider offering our services on an "à la carte" basis in the face of limited resources. Other professions have considered this option unacceptable, as should we.

Reason 3: Our Pharmacists

Most pharmacists, when asked what led them down their chosen career path, will provide a similar answer: "I wanted to help people. I wanted to know that, at the end of the day, my skills had made a difference in somebody's life." A fulfilling and satisfying job that allows pharmacists to use their skills and expertise to improve the health of patients is the key to retaining staff. Asking our pharmacists to provide a service that is substandard and that does not use all of their skills will not foster a high level of job satisfaction and will have 2 key consequences. Many pharmacists will simply resign in search of a better position. Others will stay, but they will eventually lose the skills that they have been asked not to use, they will become dissatisfied with their jobs (and will resent management for that dissatisfaction), and they will have a negative influence on new staff who are recruited. The solution is to let our pharmacists do the job they were trained for, even if that means limiting service to a selected group of patients.



Reason 4: Our Professional Identity

Pharmacists are well respected within hospitals for the expertise and value they add to the interdisciplinary team. Indeed, hospital pharmacists commonly practise in a strong collaborative and integrated clinical role. The decision to offer a scaled-back clinical service may jeopardize the level of trust and respect that has taken so many years to build in the hospital setting. After many months of observing pharmacists delivering substandard service, other professions may soon begin to believe that this is all we are capable of providing. However, if we continue providing comprehensive service for only selected patients, those health care professionals who work with pharmacists will continue to be exposed to and appreciate the full value of the pharmacist's role. And those who have the pharmacist withdrawn from their team completely may become our loudest and strongest advocates in finding a permanent solution to the problem of inadequate resources.

Should clinical pharmacist resources be equally distributed across an institution to ensure a consistent level of service to all

patients? Of course they should, but only if there are adequate resources to allow for pharmaceutical care to be the service that is provided. If you are not lucky enough to work in an institution with this level of resources, then you must follow the precedent set by other professions and reduce access to the service without reducing the quality of that service. You must do it for our patients, for our pharmacists, and for our profession.

Derek Jorgenson, BSP, PharmD Clinical Coordinator Saskatoon Health Region Pharmacy Department Clinical Pharmacist West Winds Primary Health Centre Saskatoon, Saskatchewan

Reference

 Kaboli PJ, Hoth AB, McClimon BJ, Schnipper JL. Clinical pharmacists and inpatient medical care: a systematic review. *Arch Intern Med* 2006;166(9):955-964.

