

scriptions with categories of conditions (or symbols for organ systems) that the physician simply ticks off² (e.g., “cardiovascular” or “neurology or mental health”). The vast majority of prescriptions are for conditions that are unlikely to generate privacy concerns for patients, such as hypertension, diabetes and gastroesophageal reflux. Stating the indication for the prescription will also provide important information for patients, many of whom have difficulty keeping track of which prescription is for which medical condition.

Bhanji’s concerns about the legal and ethical protections for electronically stored medical information and about the possibility that commercial interests will hijack electronic prescribing for mass marketing have received widespread attention. They should not stop us from proceeding with important advances in managing health information; similar concerns in other sectors have not prevented us from now routinely making electronic transactions involving important personal information.

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Prescribing powers for pharmacists

At a time when the impact of diagnostic error on patient safety is finally being appreciated, the news that pharma-

cists in Alberta will be allowed to diagnose medical conditions¹ will generate alarm and some despondency among researchers in this area.

There is now abundant evidence that delayed or missed diagnoses are widespread and that in more than 50% of such cases there are serious adverse outcomes. They are the primary source of litigation against both family physicians and emergency physicians.² Not infrequently, apparently simple presentations of illness turn out to be incipient catastrophes. Dissecting aortas present as constipation; subarachnoid hemorrhages as muscle tension headaches; acute myocardial infarctions as stomach upset; and meningitis, encephalitis, cavernous sinus thrombosis, peritonsillar abscess and epiglottitis as the common cold. It is extremely easy to be fooled, and one is more easily fooled when one fails to elicit a history of the presenting illness and a relevant past medical history and to perform a physical examination. The money that pharmacists will have to pay for \$2 million in personal professional malpractice insurance¹ will be well spent.

Besides this overarching safety concern, the other major problem is the potential for conflict of interest: pharmacists have a commercial interest in what they prescribe. Pharmaceutical companies will certainly waste no time in “detailing” pharmacists. Sadly, physicians have adapted poorly to the variety of creative, insidious and sometimes unethical marketing practices that the pharmaceutical industry has used to influence them.³ Human nature being what it is, pharmacists will be especially vulnerable in this regard owing to their proximity to the patient-medication interface.

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Preventing adverse drug events

I read with interest Alan Forster’s article on preventing adverse drug events after hospital discharge.¹ In the 2 cases he outlines, it is likely that the involvement of a hospital pharmacist would have helped to prevent the adverse outcomes described.

The pharmacists in our small community hospital, which serves a largely geriatric population, offer a service that helps to minimize some potential problems with medications at discharge. For many patients, the pharmacists create a “discharge medication profile,” which is reviewed with the patient or their family members or both at discharge. These profiles are typically provided for patients who take more than 5 medications on a chronic basis, for whom several new medications have been prescribed, or whose medication types and dosages have been changed during their hospital stay.

To create the profile, the pharmacist completes a table that includes all current medications, directions, times to take each medication, the medical condition for which each medication is prescribed and any special instructions, all in easy-to-understand language. The pharmacist ensures that the patient has any new prescriptions that are required and will contact the prescribing physician if the prescriptions have not yet been written. The pharmacist also informs the patient which medications he or she should stop taking or take differently at home. The pharmacist may liaise with the patient’s community pharmacist to arrange dosette or blister packing or to update him or her about medication changes.

The discharge medication profile is an accurate and legible medication list that can be used by other health care providers, such as home care nurses and community pharmacists. A copy is sent to the patient’s general practitioner

so that he or she also has a summary of the patient's medications at discharge.

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Novel technique for critical care training

Capital Health provides care for 2 million Albertans across 9800 km². Many critically ill patients require transfer to Edmonton. Long distances, climatic factors and resource pressures complicate how we stabilize and transport patients and then triage them at the receiving hospital. A major communication aid is the critical care line, a 24-h service with teleconference capabilities and contact numbers for both transferring and receiving staff.

Given the importance of optimal communication, we have incorporated simulated calls from the critical care line into the education of trainees in critical care medicine. Senior trainees are paged during a normal workday by the line. A facilitator assumes the role of a physician in a distant town. Relevant staff members are notified of this exercise and asked to act as they normally would. For example, emergency physicians and internists are notified that they may be brought into the call if the trainee decides, for instance, to bring the patient through the emergency department for further workup or if no bed is currently available in the intensive care unit. All calls are recorded to aid debriefing.

These simulated calls allow us to ascertain how well trainees obtain focused histories, offer practical advice appropriate to the skill set of the referring physician and deal with complex ethical issues (e.g., deciding what to do if a family wants to override a patient's wishes about medical intervention or deciding how aggressively to treat a ter-

minally ill patient with whom no discussions have occurred about end-of-life care). We can test not only factual knowledge but also how that knowledge is applied in practice.

The Royal College of Physicians and Surgeons of Canada has decreed that physicians must be not just medical experts but also communicators, collaborators and managers.¹ Our novel, simple and cost-free addition to training helps to address these laudable goals. The technique has been very well received, and we hope others may consider using it.

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Training Canada's future clinician-teachers and researchers

Although Mark Baerlocher's review of data from the 2004 CFPC/CMA/RCPC National Physician Survey¹ suggests that medical students have a greater desire to engage in teaching or research than physicians currently in practice, it fails to address the key issue revealed by the data: a noticeable disparity between student intention and physician action. Do current students have a genuine commitment to teaching and research or are they simply being optimistic about their future career?

In the survey, residents in family medicine programs were not asked whether research training was included in their residency program, let alone whether they perceived such training to be necessary. Residents in specialty programs fared somewhat better: they were asked to evaluate the necessity

and quality of their research training. However, none of the residents were asked about the pedagogical content of their programs.

If we wish students to retain an interest in teaching and research we must foster it early in their training programs.² Knowing the current status of pedagogy and research training in residency is the first step to ensuring a future supply of clinician-teachers and scientists.

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[Dr. Baerlocher responds:]

In his interesting letter, Andrew Perrin makes a good point: intention may not translate into action when it comes to participating in research during one's medical practice. If this is true, it may be due in part to a lack of research training, but other factors may also play a role, such as the negative impact of research on income or a lack of time. One solution that has been proposed is the creation of research chairs, which provide protected research time.

I fully agree with Perrin that we must foster student interest in teaching and research early in medical training programs. All residency training programs, including family medicine, should include a compulsory research project. After all, every physician will need to evaluate research at some point and personally performing some research is a great way to learn how to critically evaluate the work of others.

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