Do you really know how tall you are?

Whereas it is customary for patients seen in ambulatory care settings to have their weights measured, heights are usually taken from the patient's recollection. To see if this practice may result in incorrect estimates of body mass index for people with diabetes, 100 consecutive adult outpatients newly referred for consultation regarding diabetes (32 patients with type 1 diabetes and 68 patients with type 2 diabetes; 47 women and 53 men) were asked what they believed their height to be, then had their height and weight measured.

Only 18 of the 100 patients correctly estimated their height within 0.5 inch of its measured value. Of the remaining 82 patients, 76 overestimated their height by more than 0.5 inch (including 14 who overestimated their height by 2 inches, 5 by 2.5 inches, 4 by 3 inches and 1 by 4 inches). Only 6 patients underestimated their height by more than 0.5 inch.

When measured rather than recollected heights were used, 4 patients moved from the normal range of the body mass index (18.5–24.9 kg/m^2) into the overweight range (25.0–29.9 kg/m^2), 11 patients moved from the overweight range into the obese class I range (30.0–34.9 kg/m^2) and 6 patients moved from the obese class I range into the obese class II range (>35.0 kg/m^2). In contrast, 2 patients were reclassified as being in the normal range rather than the overweight range and 1 patient was reclassified as being in the obese class I range rather than the obese class II range.

The patient's type of diabetes was not a predictor of their ability to accurately estimate their height, nor was their age. (The mean age of patients estimating their height within 1 inch of its measured value was 48 years; the mean age of those estimating their height to be more than 1 inch greater or less than its measured value was 50 years). Women, however, were more likely to accurately estimate their height (35 of 47 women v. 24 of 53 men estimated their height within 1 inch of its measured value, $p = 0.003$).

Aspirations for greater stature in life are clearly more than just figurative.

Ian Blumer
Internist
Ajax, Ont.

Author's note: Subsequent to the completion of this study I measured my own height. This was 5 feet, 8.5 inches, which is exactly 1 inch shorter than I had thought.

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Safe prescribing

Kaveh Shojania proposes several solutions to the pitfalls associated with illegible or hard-to-interpret prescriptions, including 2 suggestions of ways to prevent misinterpretation of written prescriptions.[1] The first and best, according to the author, is to have physicians indicate both the generic and the brand names of a medication on the prescription, with the example "Zyrtec (cetirizine)" mentioned for illustration. Although this idea may appear logical and foolproof, it might lead to the dispensing of more expensive medications, since, on reading the prescription, the pharmacist may interpret it to mean that only the branded version of the product should be used.

The second proposed solution is to write the indication along with the product (as in "Zyrtec for rash"), but this approach, too, has drawbacks. What would the author have written if prescribing Zyprexa (olanzapine) for the dishevelled person described in case 1? I also wonder if the legal and ethical aspects of this suggestion have been reasonably examined. These concerns arise from my experience as a former pharmacist and a practising psychiatrist. With this background, I recognize that although physicians may take for granted the confidentiality of data on their prescribing habits (as collected by IMS and sold to pharmaceutical companies),[2,3] this may not be the case. At present, disclosing too much information without adequate safeguards has the potential to create problems not easily anticipated by prescribing physicians.

Finally, the author suggests that electronic prescribing will prevent medication errors. I agree that it may aid in this arena, although the safeguards against legal and ethical issues are far from clear. Wouldn't it be a shame to see e-prescribing evolve into mass marketing, whereby prescribers are bombarded by email messages from competing pharmaceutical companies for each product that they prescribe?

Nadeem Bhanji
Assistant Clinical Professor
University of Calgary
Calgary, Alta.

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[Dr. Shojania responds:]

Even the most plausible, well-intentioned interventions to improve care can be undermined in unexpected ways.[1] Thus, I fully support subjecting proposed safety interventions to the type of critique offered by Nadeem Bhanji. Nonetheless, I think the recommendations I made remain reasonable.

Bhanji worries that pharmacists will interpret prescriptions that include both the generic and the brand names of a medication as requiring dispensation of the brand name drug. If "Do not substitute" is not written on the prescription, I think most pharmacists would proceed with whatever generic substitution they would usually make. In fact, many provinces mandate such substitutions.[2,3]

I agree that the alternative solution of stating the indication for the medication requires discretion. For potentially sensitive conditions I would suggest that physicians use the generic name plus brand name approach and ask their patients for permission to include specific diagnoses on their prescriptions. Another possibility is to use preprinted pre-

scriptions with categories of conditions (or symbols for organ systems) that the physician simply ticks off[3] (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.

Kaveh G. Shojania
Clinical Epidemiology Program
Ottawa Health Research Institute
Department of Medicine
University of Ottawa
Ottawa, Ont.

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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 pharmacists in Alberta will be allowed to diagnose medical conditions[1] 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 insurance[1] 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.

Pat G. Croskerry
Department of Emergency Medicine
Dalhousie University
Halifax, NS

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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