



Improving preventive care

I read with interest the article on missed opportunities for preventive interventions when patients are in hospital.¹ When I was an ambulatory care fellow at the Veterans Affairs Medical Center in Salt Lake City, Utah, I was involved with a project from 1993 to 1995 designed to increase attention to preventive care in general internal medicine outpatient clinics.

The project involved 2 strategies: transfer of many activities to nursing staff through education and standing orders, and provision of patient-specific reminders.

Rates of documentation of 11 preventive interventions including patient education (smoking, alcohol, diet, exercise and seatbelt use), screening (blood pressure, occult blood screening in stool samples and cholesterol) and immunizations (influenza, pneumococcal and tetanus-diphtheria vaccines) were examined in patient charts. The documentation rates were measured at baseline, after education of and delegation to the nursing staff, and again after the additional use of manually generated patient-specific reminders. A single-page coloured "Health Maintenance Record" was included at the front of each chart for documentation and reminder purposes.

Overall documentation rates rose from 50% at baseline to 76% after delegation to nursing staff and to 97% after the additional use of reminders. The rate of documentation of patient education increased most dramatically, from 30% at baseline to 95% after nursing staff involvement and use of reminders. The respective increase in the rate of immunization documentation was from 69% to 98%.

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Reference

1. Brull R, Ghali WA, Quan H. Missed opportunities for prevention in general internal medicine. *CMAJ* 1999;160(8):1137-40.

I am not surprised that we are missing opportunities for prevention in general internal medicine for inpatients.¹ General internal medicine patients are not admitted for preventive care. They are admitted because they are sick — often very sick, with multisystem involvement. Most are elderly, and many have been receiving other levels of care. The patients are often too ill to discuss prevention or have pre-existing cognitive problems that make such discussion impossible. They may have a burden of disease that makes most preventive manoeuvres unlikely to make a difference.

The demands are many, the time is short. In our current environment there is unrelenting pressure to move these patients through the system as fast as possible, to make way for the never-ending stream of patients entering the emergency department who also require admission to hospital.

Preventive medicine is difficult to practise and often of limited benefit in the general internal medicine ward setting. Where it should be improved is in the office setting, where circumstances are more conducive to discussion and a larger proportion of patients may benefit.

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Reference

1. Brull R, Ghali WA, Quan H. Missed opportunities for prevention in general internal medicine. *CMAJ* 1999;160(8):1137-40.

[The authors respond:]

Dawna Gilchrist makes 2 arguments against the concept of preventive care in the acute care setting. Her first argument is that prevention is unlikely to make a difference among general internal medicine inpatients with multisystem disease. Gilchrist is overlooking the fact that the typical medical inpatient is, in fact, a person who stands to benefit the most from interventions such as influenza and pneu-

mococcal vaccination. Likewise, individuals with comorbidities such as diabetes and chronic renal inefficiency are those who need the most careful monitoring and follow-up of their blood pressures. In addition, despite common belief, it is never too late to consider smoking cessation, as there are established benefits of smoking cessation that extend to geriatric patient populations.¹

Her second argument is that even if it were worthwhile, it is too difficult for physicians to provide preventive care. She rightly points out that "preventive medicine is difficult to practise," particularly in the general internal medicine ward setting. Although we do not dispute that preventive care is a challenge to practising internists (who are often already stretched to the limit), we are not ready to dismiss a potential role for general internists in addressing the clear shortfalls in preventive care simply because it is "difficult." Rather, we proposed in our article that preventive care can be enhanced by general internists.² This view is shared by the Canadian Society of Internal Medicine in its assertion that disease prevention should be a focus of general internists because they often encounter acutely ill medical inpatients at a time when responsiveness to preventive interventions may be highest.³

The general sentiments conveyed in Gilchrist's letter highlight a fundamental challenge to those endeavouring to improve preventive care, and quality of care in general, in our health system. Many physicians and clinical care systems are already working at or near capacity. Care will only improve when we begin to develop resources and use technologies (e.g., physician extenders, computerized reminder systems) to assist physicians to expand their capacity.

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Quality control in nursing homes

Jean Chouinard's¹ comment that nursing home "quality of care should be measured ... on an ongoing basis" deserves applause. However, to characterize the Minimum Data Set (MDS) as a good first step hardly describes the benefit realized by Ontario's system-wide implementation of the instrument in chronic care hospitals. It is now possible to benchmark hospital performance on at least 24 valid and reliable indicators of the process and outcome of care.² In an Ottawa hospital study, Maxwell and colleagues³ showed how the MDS addresses problems such as falls, incontinence, restraints and common infections.

To suggest that the MDS "fails to link defined outcomes to specific processes of care" confuses questions of measurement with questions of analysis. Using Chouinard's example of the need to assess skin care and nutritional support as predictors of pressure sores, one can find 9 items devoted to skin care and 15 dealing with nutritional status that can be related in longitudinal analyses to 14 items on pressure ulcers and skin condition in the MDS. The data are clearly there. One need only take the time to do the analysis to answer Chouinard's question.

The call for standardized assessment to address the needs of older people is more than a decade old. Now we hear a chorus of voices rising to say that quality of care in nursing homes must be evaluated on a systematic basis. The MDS is the best available tool to address these questions and more. Cana-

dian long-term care facilities could continue to gaze into the distant future in search of a perfect system that will win the unanimous applause of all people interested in health care for the elderly. However, that day may never come. The MDS is here today, and it represents a giant leap forward from where we were yesterday.

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Competing interests: Dr. Hirdes is a member of the Board of Directors of interRAI, which owns the international copyright for the MDS series of instruments.

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[The author responds:]

John Hirdes' thoughtful comments deserve clarification. The epistemology of health outcomes in institutions is as yet poorly defined, although we generally agree on what should *not* happen to nursing home patients. What is surprising is the lack of empirical data supporting the effectiveness of interventions for common clinical problems,^{1,2} although fortunately this is changing.³ Can the MDS help in this regard? It does provide standardized, risk-adjusted outcome data that can be used to compare facilities and specific patient subgroups. However, it does not further qualify or quantify the interventions being carried out on each patient, nor does it support prognostication even at a crude level. Therein lies the problem. The mere existence of a care process does not ipso facto lend support to its effectiveness.

The MDS provides a sound, validated, systematic approach to care

planning, costing and outcome evaluation. It should be broadly implemented not only in chronic care facilities but in home care, nursing home and ambulatory care settings. It is, however, only part of the answer. Formal research is needed to improve clinical care in these settings. Methinks inferences on the effectiveness of specific interventions on the basis of MDS data smack uncomfortably of *deus ex machina*.

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Evolving attitudes

The recent report by Susan P. Phillips and Karen E. Ferguson¹ on the changes that occur in students' attitudes about women as they progress through their undergraduate medical curriculum is encouraging. However, because their novel assessment tool lacks normative data it is difficult to know how the attitudes of the students compare with those of the patients they will serve and the other health care professionals with whom they will work.

The sex role ideology scale of Kalin and Tilby² is a validated scale that defines prescriptive beliefs about behaviour appropriate to men and women. A study involving health care professionals in Manitoba³ showed that physicians were at least as advanced in sex role ideology as the general population they served. However, there were striking differences between members of various health professions even after such variables as age and sex were controlled for. The most feminist groups were social workers and psychologists. The least feminist were registered nurses and licensed practical nurses.³ Physi-



cians were somewhere in between. In related studies, psychiatrists were found to be significantly more feminist than their other medical colleagues.^{4,5}

It is important to address this ideological gap in the training of health care professionals. Many of my patients teach me that I still have far to go in breaking free from patriarchy. For other patients, collaboration in care is an unfamiliar concept, and I must educate them that such collaboration will produce better outcomes.

Christel A. Woodward's editorial⁶ in the same issue suggests that the changes in medical students' attitudes reflect the changes we see in society itself. The challenge for physicians is to deal with a diversity of attitudes and beliefs among our patients and our colleagues as we work with them to ensure a relationship that promotes the greatest health gains.

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[One of the authors responds:]

Dr. McNevin addresses the question of whether physicians hold more stereotypical views of the role of women than do other health care professionals, or the public. I share his interest in the question, and his belief that medical education must address diversity and minimize patriarchy. Our study¹ did not, however, attempt to answer this question. Instead, we examined the association between medical education and changes in stereotypical thinking, willingness to control decision-making of female patients and conceptualization of women as other or

abnormal because they were women. We did not compare beliefs with those of any external group, nor did we attempt to state absolutely whether students were, for example, feminist or patriarchal. Only relative changes among the students themselves, over time, were described.

Portions of the sex role ideology scale were extracted and used in our questionnaire, as were questions from several other validated and nonvalidated survey instruments (these are cited in our article, as is Kalin and Tilby's scale). As researchers, a major challenge we faced was finding a survey that would address all aspects of our study and elicit truthful rather than socially desirable responses. Pilot testing was invaluable in helping us to create the questionnaire we ultimately used.

McNevin's willingness to learn from and work with patients, rather than control them, exemplifies attitudes I believe are positively transforming the pedagogy and practice of medicine.

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Reference

1. Phillips SP, Ferguson KE. Do students' attitudes toward women change during medical school? *CMAJ* 1999;160(3):357-61.

Educating med students about alternative therapies

I read with interest the recent Research Letter on complementary and alternative medicine (CAM) in Canadian medical schools.¹ History taking is fundamental in undergraduate and postgraduate teaching, but students should also be taught to ask patients about their use of CAM.² Only 39.8% and 38.7% of alternative therapies being used by patients were being disclosed to physicians according to surveys conducted in 1990³ and 1997.⁴

Despite some claims that CAM preparations are harmless, these products have been documented to cause allergic^{5,6} and other adverse drug reactions

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and interactions.⁷ Asking patients about their use of these products is of paramount importance in determining actual or potential drug allergies or other reactions. I wonder if the 16 Canadian medical schools have specific instruction on this type of history taking.

The evidence-based approach to CAM education is not mentioned in your Research Letter. In a recent survey at a Canadian medical school, 65% of first-year students wanted a course in CAM. The authors recommended that evidence-based but nonjudgmental education on CAM be a required component of undergraduate medical education.⁸

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Blood money

I was astonished to read that the Canadian Blood Service will spend \$20 million annually for genome amplification testing to allow the detection of an additional 5-7 cases of hepatitis C among blood donors each year and an

additional case of HIV infection every 2-3 years.¹ The costs seem high when considered against the gains; this is exactly what cost-effectiveness analyses are about. It is not at all clear whether the long-term impact of their strategy was assessed. The government, through the Canadian Blood Service, may have unwittingly established a benchmark, in a Canadian context, for what constitutes a medically cost-effective intervention. After all, they seem willing to spend \$2.9-4.0 million per *potential* case of hepatitis C and \$40-60 million per *potential* case of HIV infection identified. These are orders of magnitude higher than previously published recommendations.²

The money spent by the Canadian Blood Service does not seem to be technically, productively or allocatively efficient.³ It is not so much that \$20 million is being spent annually for so little gain, it is the lost opportunity of not being able to fund other, perhaps more worthwhile, initiatives given the competing claims for limited funding. How many lives might be saved if \$20 million were

applied annually to the waiting list for coronary artery bypass surgery?

Perhaps it is time to establish an agency to appraise medical technologies (drugs and devices) for consideration of additional funding to hospitals.⁴ At present, the cost of most new advances must somehow materialize from within the global, and shrinking, budget of individual hospitals. This may explain some aspects of variations in practice patterns through implicit rationing, and the government is able to avoid both costs and blame. It is high time for evidence-based budgeting, at both the macro and micro levels.

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