

Everyone claims victory in health care deal, but who really won?

On Sept. 12, the day after the First Ministers Conference ended, the words “health deal” dominated the headlines. Despite predictions from all sides that the talks were doomed, the prime minister and provincial and territorial leaders all signed on the dotted line and agreed to increased federal transfers in a deal worth \$23.4 billion over 5 years.

Each side immediately proclaimed victory at the expense of the other, but this was as predictable as snow in January: elections loom both federally and provincially, and everyone wants to wear the cloak of “protector of medicare.” And as Saskatchewan Premier Roy Romanow put it ever so succinctly, any premier who went to the polls after spiking a health care deal would be “dead meat.”

So what does the deal mean? First, more money. Not as much money as the premiers wanted, of course, and money that is not coming as quickly as necessary. Nevertheless, the premiers got what they have been clamouring for ever since Ottawa began to report surpluses. The agreement to put back into provincial transfers the billions carved out of the system in the 1995 budget will boost Ottawa’s spending on health and social programs by about 35% over the next 5 years, from \$15.5 billion this year to \$21 billion in 2005.

The deal hinged on Quebec and Ontario, the 2 most populous provinces and the only 2 to arrive at the meeting in a pugnacious mood. For different reasons, Premiers Lucien Bouchard and Mike Harris want to eliminate the fed-

eral role in health care. They presented a solid front. Harris announced that he would not agree to any deal that Bouchard would not sign, and this enraged the other premiers. Why would Ontario’s premier give a veto to someone outside his own province? they asked. The Atlantic premiers, in particular, were eager for a deal, because they desperately need the money. And unlike Quebec and Ontario, they actually want Ottawa to play a stronger role in health care.

well with the other premiers; Alberta’s Ralph Klein suggested that they had endangered consensus in order to play word games.

The deal that was signed is a lot less ambitious than the one the federal government had hoped to secure. While campaigning for re-election 3 years ago, the federal Liberals promised that they would introduce home care and pharmacare programs. These, of course, never saw the light of day because of provincial hostility over having such programs introduced under the federal banner.

Ottawa has also had to back off from its plans for a federal reporting mechanism that would tabulate health care statistics across the country and allow the federal government to establish national standards. The deal signed by the premiers makes only a vague mention of a “third party” that will collect and compare statistics from each province; provinces don’t have to produce “report cards” for at least 2 years. In other words, the provinces got their money with

few strings attached, and it is not yet evident if and when Canadians will see any real reforms in the health care system. The new dollars from Ottawa could be siphoned off to welfare or postsecondary education programs.

So did the deal represent a defeat for the federal government? Absolutely not, the feds say. The agreement re-legitimized Ottawa’s role as guardian of the Canada Health Act, since the premiers all committed themselves to the CHA’s principles of universality,



Canapress

Why is this man smiling?

Friction among the premiers was clear in many of the nasty comments made during the talks, but in the end federal bureaucrats amended the final communiqué to assuage Harris and Bouchard, who were concerned that it gave Ottawa and the provinces equal roles in health care, even though health is a provincial responsibility. This allowed the 2 renegade premiers to claim they had stopped Ottawa from encroaching on provincial turf. The Bouchard-Harris “victory” did not sit

accessibility, comprehensiveness, portability and public administration.

The deal also represents real progress in some directions that will improve the delivery of care and ensure a national rather than a patchwork system. The initial \$500 million for health data technology is only the first step in a potential \$2.8 billion program. The federal government also put \$1 billion in the pot for medical equipment, an investment that allows Ottawa to claim a leadership role in modernizing health care.

Politically, this conference allowed Jean Chrétien to emerge with more

moral authority than most of his provincial counterparts. The unholy alliance between Harris and Bouchard, the exasperation that Harris triggered in Ralph Klein, the unseemly spitting match between the have and have-not provinces — all this revealed that Ottawa bashing is the only activity that unites premiers.

Bouchard's signature on the final deal must have been particularly gratifying for Chrétien. Only 3 days earlier, Bouchard had expressed outrage that Ottawa was trying to bring the provinces "to their knees." However,

Chrétien also knew that Bouchard could not afford to walk away from the deal: his voters would never forgive him. He simply told the Quebec premier that if he didn't sign, he wouldn't get the money. And billions of dollars will lubricate any negotiations.

In the end, Chrétien managed to smooth over voters' fears about health care, reveal the rifts between the premiers and reinforce his vision of health care as a national program, rather than a crazy quilt of different provincial services. All in all, not bad for a day's work. — *Charlotte Gray, Ottawa*

Canada's only Di Bella cancer clinic a very lonely place

One year after Canada's first Di Bella method (DBM) cancer clinic opened in Toronto's Italian district, the number of patients it has attracted can be counted on 2 hands. In fact, 1 hand might do the trick.

"I must say, it is a little discouraging at times," said Dr. Aaron Malkin, 12 months after setting up the Isola Bella Oncological Multiple Therapy Clinic in a second-floor office in August 1999. During its first year the clinic received many inquiries, Malkin said in an interview, but it actually treated only "5 to 10" patients. This was a far cry from the situation in 1997 and 1998, when the "cure" developed by Italian physiologist Luigi Di Bella was attracting a firestorm of international attention. As Charlotte Gray reported in *CMAJ* in 1998 (158[11]:1510-2), the phones of Toronto MP Joe Volpe were then ringing 10 times a day with inquiries about DBM. Most callers wanted Volpe, an Italian-Canadian who was then parliamentary secretary to the health minister, to explain why the "miracle" cocktail was not available in Canada.

Di Bella's controversial cocktail combines bromocriptine, melatonin and somatostatin or octreotide with complementary substances, including vitamin C and shark cartilage; it is taken with low doses of chemotherapeutic agents such as cyclophosphamide.

Under immense political and popular pressure, Italian health officials supported historical studies of DBM patients and 11 uncontrolled phase II trials. The historical review, reported last year in *Cancer* (86[10]:2143-9), concluded that the 5-year survival rate for DBM patients was significantly lower than for patients receiving conventional therapy, with no evidence of improved survival prospects. The phase II trials, reported in the *BMJ* (1999;318:224-8), found insufficient efficacy to warrant further clinical trials.

Malkin thinks his Toronto clinic is the only one of its type in North America. The clinic's original advertising was limited to the *Buffalo News* and a Toronto-based Italian-language newspaper, but in August he began promoting the clinic and DBM on a Web site, www.oncomtc.com.

Three doctors are involved in the clinic. Malkin, an internist with a doctorate in biochemistry, was head of clinical biochemistry at Toronto's Sunnybrook Hospital from 1961 to 1992. The other physicians are DBM specialists based in Italy. Malkin meets initially with the patient, then consults with his Italian colleagues, who develop a treatment protocol that is prepared by an Italian pharmacy. Initial treatment lasts at least 3 months. "For all of these services, the Isola Bella Clinic will require a retainer of \$3800 for the first

month and \$1300 for each month thereafter," Malkin's Web site advises.

The site acknowledges that evidence of DBM's efficacy is "anecdotal" and there is "currently no acceptable Canadian medical proof that this treatment will cure cancer."

Why, then, did he bother introducing the widely discredited protocol here? "I'm curious about the results, and I'm looking after the patient's interest," he said. "All of the information until now has been anecdotal. Di Bella and his colleagues didn't do a careful study."

Because some components of DBM have known anticancer properties, Malkin "thought it would be interesting to see what happened" during treatment. As for his own lack of patients, he says: "I'm not worried about that. I'm semi-retired. I'm doing other things."

At the Canadian Cancer Society, medical affairs director Dr. Barbara Whyllie was unwilling to express direct criticism of the Di Bella treatment. Whyllie said the society recognizes the growing public interest in complementary cancer therapies and supports the right of patients to make their own decisions about treatment. However, "before abandoning conventional therapies and taking up any complementary therapy, they should thoroughly discuss implications with their physician or health care provider." — *David Helwig, London, Ont.*

Xenotransplantation survival

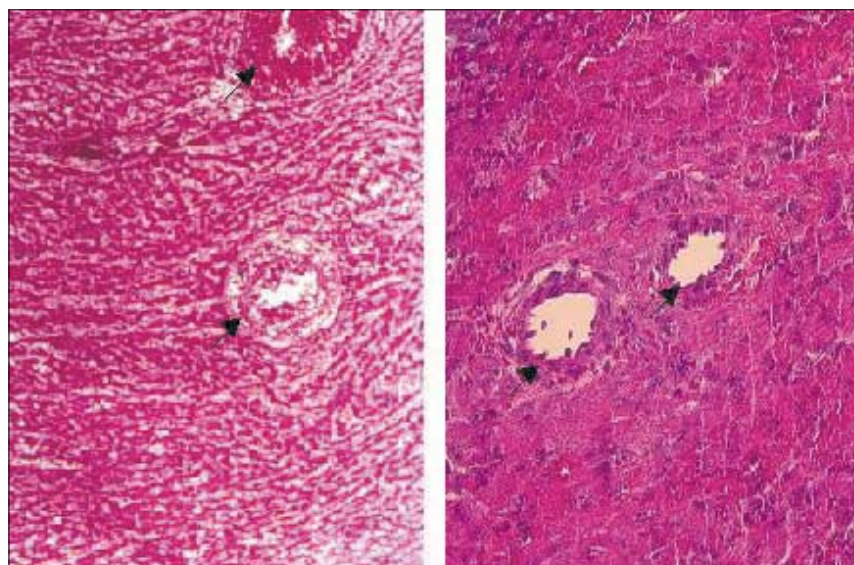
The cytokines γ interferon and interleukin-12, believed to exacerbate rejection in human-to-human organ transplants, appear to have the opposite effect in xenotransplants, a group of London, Ont., researchers has discovered (*Nat Med* 2000;6:481-603).

Mice with high levels of the 2 cytokines took an average of 24 days to reject grafted rat hearts, compared with just 6 days for mice with a cytokine deficiency.

"This changes the emphasis," says David Kelvin, an immunologist at the Robarts Research Institute and the University of Western Ontario. "Before, we had thought that these molecules were a negative influence on the survival of allografts. We found that

these molecules have a beneficial effect in xenograft rejections."

The cytokines were found to regulate acute vascular rejection (AVR), considered the major obstacle to successful xenotransplants. Although researchers have largely overcome the initial hyperacute rejection of xenografts, AVR sets in within days, destroying the organs within weeks or months. The prospect of regulating AVR without antirejection drugs could lead to new therapeutic strategies for controversial pig-to-human transplants. As both γ interferon and interleukin-12 are present in humans, the new findings point to a possible "genetic starting point" for preventing or minimizing graft rejection, the authors say. — *David Helwig*, London, Ont.



Arrows indicate vessels, diseased (left) and healthy (right), in rat heart grafts transplanted into mice.

Pathologists dismayed by recruiting problems

With only 18 residency positions available in the entire country, it must be very difficult to enter laboratory medicine specialties such as general pathology, right? Wrong, says Dr. Sandip SenGupta, vice-president of the Canadian Association of Pathologists. Writing in the latest issue of the *CAP Newsletter*, he said that despite the small number of positions available, one-third of them remained unfilled after the 2000 residency match. In that match, only 10 of 1084 participants listed a laboratory medicine specialty as their first program choice. He warned of a "downward spiral to oblivion" for laboratory medicine unless recruiting, including recruitment of international medical graduates, improves. "Only with an all-out offensive effort can we expect to be successful in stemming the tide and saving the profession for the next generation," he said.

Immune in the womb

A new vaccination technique developed by Saskatchewan researchers could one day protect fetuses against infectious diseases such as AIDS and hepatitis B.

Dr. Philip Griebel and colleagues at the University of Saskatchewan's Veterinary Infectious Disease Organization successfully immunized fetal lambs against a herpesvirus by injecting DNA vaccine into amniotic fluid in the fetal animals' mouths. The procedure, performed during the third trimester, elicited a strong immune response systemically and in the oral cavities of all of the lambs. Viruses transmitted from the mother at or shortly after birth typically enter an infant's body through mucous membranes in the mouth, nose or eyes.

It has long been thought that fetuses do not have fully developed immune systems, said Griebel. Thus, researchers believed in-utero vaccination would produce a tolerance rather than an immune response to an introduced pathogen. "We showed quite clearly that this is not the case," said Griebel.

If the findings, published in *Nature Medicine* (2000;6:929-32), are borne out by further research, the transmission of disease from infected mothers to their children during birth or breast-feeding could eventually be prevented. To date, providers have tried to reduce risk of disease spread by delivering babies by cesarean section or by treating the mother or baby with antibiotics.

Given that the new procedure carries some risks, it would likely be reserved for pathogens whose spread would pose a serious threat to the fetus — among them herpes simplex viruses, HIV, group B streptococci, *Haemophilus influenzae*, and *Chlamydia trachomatis*. Griebel says 2 to 3 years' research is needed before the procedure will be ready for clinical trials in humans. — *Greg Basky*, Saskatoon

CMAJ's new editorial fellow merges science and science fiction

Dr. Alison Sinclair leads a double life: part physician en route to becoming a pathologist and part critically acclaimed science fiction writer with 3 books, a rave review from *The Times* and a nomination for the Arthur C. Clarke Award.

Sinclair brings her multiple talents and considerable energy to *CMAJ* as its third editorial fellow. The fellowship is a 1-year position that gives residents a chance to learn the inner workings of a medical journal. "I always wanted to write for a medical journal," says Sinclair. "I just wasn't sure how to get in."

That didn't deter her from pursuing her science fiction career. She fired off her first novel at age 9, and then simply kept on writing. *Legacies* was published in 1995, and was followed by *Blueheart* in 1996 and *Cavalcade* in 1998. *Throne Price*, a space opera written in collaboration with Lynda Jane Williams, will be published next year, and a fourth novel, *Opal*, is under way.

How do SF and medicine meld? "It's useful to have a broad-ranging scientific background in writing SF," she says. For instance, the underpinning of *Blueheart* is medical ethics.



Barbara Sibbald

The theme of the displaced person features prominently in her fiction, and this isn't surprising given her peripatetic childhood. Born in Colchester, England, she spent her early childhood in Edinburgh — both parents are Scots — and then moved to Canada when her father,

a radiologist, took a staff job in Victoria in 1967. They returned to Edinburgh in 1971 and came back to Victoria in 1975.

Sinclair opted to remain in Canada for university, studying science at the University of Victoria and eventually earning her doctorate in biochemistry at McMaster University, where she was also on the varsity fencing team. After graduating she spent 5 weeks at the Banff Centre for Fine Arts, studying under the renowned Alistair MacLeod.

Sinclair then spent 2 years researching Alzheimer's disease in Boston before moving to the University of Leeds, where she worked on ion-channels research until 1995. "I love pure research but it was very insecure and medical research was taking over." So Sinclair decided to become a physician. After graduating from the University of Calgary in 1999, she began a residency in anatomic pathology in that city before taking a year off to work at *CMAJ*.

Eventually she'd like to return to research, this time in molecular pathology. She also intends to keep writing SF and "playing with hard science." — *Barbara Sibbald, CMAJ*

Ontario RNs start recruiting in elementary school

Ontario is so short of nurses that the province's students are being targeted by an unprecedented recruiting drive that is even setting its sights on elementary schools. The campaign is the first of its kind in Canada.

The province's 5 major nursing groups — the provincial college, the professional association, 2 unions and the organization representing registered practical nurses — received \$500 000 from the province to pursue recruitment. The Joint Provincial Nursing Committee, headed by the Registered Nurses Association of Ontario, is compiling a recruitment package for every high school career counsellor including slides and a linked Web site. Initially, they have given each counsellor 100 copies of a special issue of the College

of Nurses of Ontario public newsletter, *Nursing and You*, that is devoted exclusively to recruitment. The 8-page newsletter explains the "science and art" of the profession and different career possibilities. It notes that less than 60% of Ontario nurses work in hospitals.

The nursing groups also plan to begin recruiting in elementary schools. "Many students make up their minds in Grade 5 and 6 about what they will do," says Mary MacLeod, president of the college (www.cno.org), which represents all 140 000 Ontario registered and practical nurses. "We need to go back to the primary grades and recruit at that age."

MacLeod says the underlying problem in recruitment is that many guidance staff hold misconceptions about

nursing. "Nursing is not what you might have thought," she said. As evidence, she points to the broader scope of practice and the move toward more education — all Ontario nurses will need a university degree by 2005. The groups are also trying to attract more men to the profession, since they account for only 5% of nurses.

Ontario alone has a shortfall of about 12 000 nurses, and the shortage is expected to get worse as nurses retire. The average age of Ontario nurses is now 45, and MacLeod says most of them retire before age 55.

In addition to the high school blitz, the nursing groups are attending job fairs, developing a nurse shadowing program and recruiting in other countries. — *Barbara Sibbald, CMAJ*

On the Net

Worshipping at the altar of the Palm Pilot

You either have the religion or you don't.

That sentiment seems to sum things up when it comes to those little hand-held devices known as PDAs (personal digital assistants). Doctors who use devices such as the Palm Pilot say they are the greatest thing since the stethoscope. Meanwhile, those on the outside shake their heads in amused scepticism.

As Dr. Gordon Hollway, a physician in Marathon, Ont., puts it: "I always used to have a bunch of different things in different places. I'd also have some addresses scribbled in my wordprocessing or email software, and then I'd forget to update my address book and I'd be left wondering which one was the most up-to-date version. Or I'd be somewhere and someone would talk about a meeting and I wouldn't be able to reschedule it because I didn't have my Daytimer. Now, as long as I bring [my PDA] with me, I know I'll have all the basics that I need."

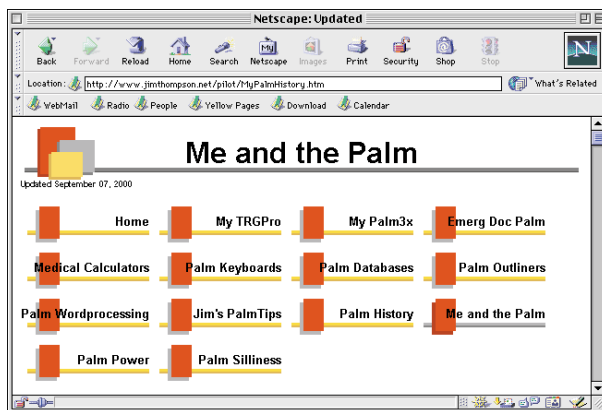
Wherever you fall in this theological debate, there is no doubt these devices are spreading like mad, and particularly within medicine. And with the modern software and capabilities of the new models, they are literally becoming a doc's best friend.

One of the best sites for all that is Palm in medicine is at (www.pdamd.com). This site includes links to medically oriented software, online forums, reviews, and even a set of testimonials from physicians who love their Palms. An entire section is devoted to selecting the right PDA and there is a set of tutorials on how to make the best use of your new technological wonder.

Another great site is Healthy PalmPilot (www.healthy-palmpilot.com), created by Toronto physician Eric Tam. As he explains things, it was his quest for "near lab-coat weightlessness" that led him to start using a PDA. His site includes more than 500 downloadable software resources for the practising physician, everything

from organizers and patient management tools to diagnosis databases and wellness software.

For those who still think the whole PDA phenomenon is laughable hype, take a look at Jim Thompson's Silly Pages site (www.jimthompson.net). Thompson, an emergency physician from PEI, is a Palm prophet who provides lots of good PDA resources, but he also knows how to laugh at the whole thing. He asks: "Do we really need to say things like, 'Hey, look what I got on my Palm last night.?' " Good question. — *Michael O'Reilly*, mike@oreilly.net



Poor conditions in refugee camps make malaria screening difficult: expert

Although it would have been preferable to have screened some African refugees for malaria before the disease was discovered after their arrival in Canada, a Montreal tropical disease specialist says the rudimentary laboratory facilities available in refugee camps make such screening difficult or impossible.

"In hindsight it is easy to say that yes, these people should have been screened, but to screen in a refugee camp is no easy matter," Dr. Dick MacLean said of the 12 cases of malaria diagnosed among 240 refugees who arrived in Canada in August from a refugee camp in Burundi.

He also said that such cases are not new among refugees arriving in Canada. "We certainly saw cases when Southeast Asians arrived in large numbers from Vietnam, Laos and Cambodia in the early 1980s, but the amount of malaria found in the refugee camps in Burundi and the Central Congo is probably greater than it was in the Asian camps."

MacLean, senior physician at the Montreal General Hospital, said his hospital sees 25 to 30 patients a year who have malaria, while the Toronto General Hospital sees 30 to 40. He said the cost of treating them is relatively small. "The cost is not in the price of

the pills but in diagnosing the disease," he said. Diagnosis can be delayed because most Canadian physicians are not familiar with malaria.

MacLean, director of the McGill Centre for Tropical Disease, said new cases of malaria will be identified among the African refugees for 2 to 3 more months.

Health Canada says the cases involving the Africans may lead to new screening recommendations for Immigration Canada. Meanwhile, MacLean says the 12 cases should be treated "as a learning experience rather than as something to panic over." — *Patrick Sullivan*, CMAJ

Pulse

Are pagers replacing the stethoscope as a medical symbol?

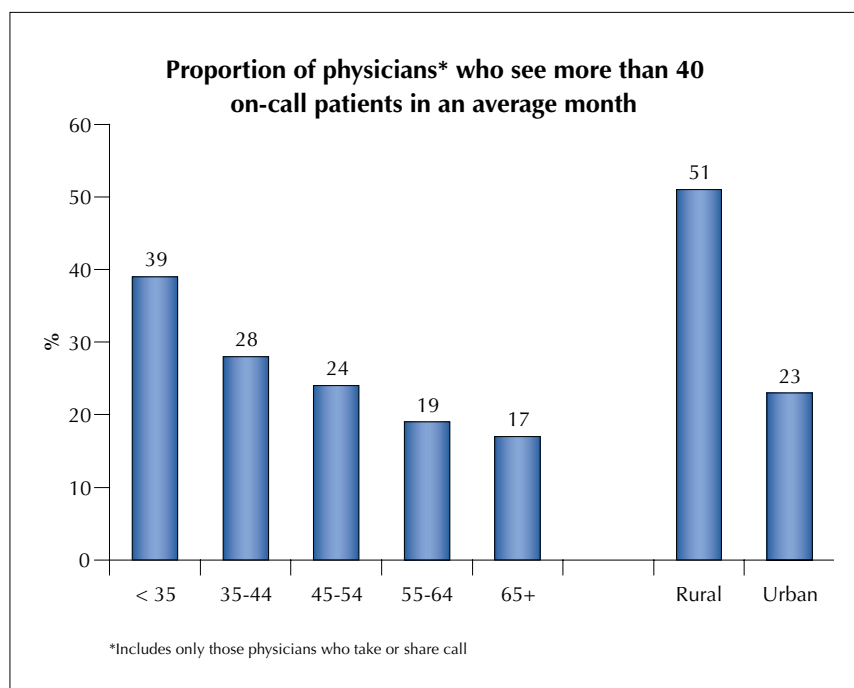
The recently released CMA 2000 Physician Resource Questionnaire found that 76% of Canadian physicians regularly take or share call duties. Until they turn 65, age has little effect on the proportion of doctors who accept call. However, by the time they reach that late stage of their careers, only

50% of physicians are still taking call.

Doctors younger than 35 are more likely to log more call hours in an average month: 22% of younger doctors reported working over 180 shared call hours per month (a schedule more frequent than 1 in 4), compared with an overall result of 16%.

Not surprisingly, rural doctors are more likely than their urban colleagues to put in more than 180 shared call hours per month (25% versus 15%). Surgical specialists are more than twice as likely to record more than 180 hours of shared call per month than are GP/FPs (27% vs. 13%); 15% of medical specialists reported more than 180 hours of shared call in an average month.

Younger physicians and those in rural practice also tend to see more patients during their call rotations. Among physicians under age 35, 39% see more than 40 on-call patients per month. This proportion decreases consistently with age, with only 17% of physicians aged 65 and older treating more than 40 on-call patients per month. More than half (51%) of rural physicians report attending to more than 40 on-call patients per month, compared with 23% of their urban colleagues. Although the age-group differences lessen somewhat when one controls for total hours of shared call per month, rural doctors are consistently twice as likely as urban doctors to see more than 40 on-call patients per month, irrespective of the total number of shared call hours per month. — *Shelley Martin, martis@cma.ca*



Manitoba hopes to lure specialists with signing bonuses

The Manitoba government has reversed its stance on paying incentives to specialists by putting aside \$1 million for just that purpose. The Winnipeg Regional Health Authority is now offering signing bonuses worth up to \$15 000 from the \$1-million fund, which was created last fall but not publicized until recently.

Earlier, Health Minister Dave Chomiak repeatedly said that his government would not get into a bidding war with other provinces to entice

specialists to Manitoba. However, while Chomiak was publicly criticizing incentives, his government was clandestinely handing out bonuses to a few specialists who had become aware of the deal.

Dr. Mark Heywood, past president of the Manitoba Medical Association, says the MMA decided to publicize the bonuses to ensure that all doctors were aware of them.

Pam Trupish, the authority's new specialist physician recruiter, says it is

too early to say how effective the bonuses will be at enticing out-of-province specialists to move to Manitoba. To date, 5 specialists have moved to Winnipeg, 4 have gone to Brandon and a Winnipeg surgeon relocated to northern Manitoba.

Dr. Brock Wright, the authority's chief medical officer, says Winnipeg still needs 36 specialists, including 5 general internists, 4 cardiologists and 3 pediatric surgeons. — *David Square, Winnipeg*

Can your patients understand you?

Nearly half of Canadians have low literacy skills, and Dr. Owen Hughes says this has huge implications for physicians. "It's a major hurdle for many of our patients and we don't realize it," the Ottawa family physician explained during the First Canadian Conference on Literacy and Health. "These people are at a significant disadvantage in our health care system. The onus is on health care providers to remove obstacles."

The *Canadian Report of the International Adult Literacy Survey* (1995) says 47% of Canadian adults have difficulty reading printed documents and about 80% of those over age 65 have serious literacy limitations. These data were part of the reason for the Ottawa conference, which was sponsored by the Canadian Public Health Association and the National Literacy and Health Program, a coalition of 27 national health associations.

Hughes, a communications expert who heads the Division of Maternal and Newborn Care at the Ottawa Hospital, told the 200 delegates that health care providers must identify illiterate or low-literacy patients, use simple and clear language (both written and verbal), and ensure that their messages are understood.

But first, physicians need training in communication. "Give patients time to get their story right," he advises, because more effective consultation leads to improved outcomes. (On average, said Hughes, physicians listen to patients for 19 seconds before telling them what to do about a problem.)

The need for better communication also extends to the forms patients are expected to sign. Lawyer Philip Knight, a Vancouver-based plain-language specialist, said frightened patients too often sign consent forms without clearly understanding what they're doing. He said consent forms for research subjects can be 30 pages long and many forms for surgical procedures resort to mind-numbing

legalese. "If your concern is to ensure that patients understand what they are signing, then you need to use clear-language techniques."

Legally, patients must know the basic nature of a proposed treatment and agree to it. "A signed consent form by itself is not proof that the duty to disclose is satisfied," said Knight.

Few people know more about the need for plain language than Ceci Conrath Doak and Leonard Doak. This Maryland couple has trained more than 11 000 health care professionals in the

do you want patients to do? Why should they do it?

- Keep the words simple and specific. What do you mean by excessive bleeding? A spot? Soaking a pad? What is "regular" exercise? Once a day? A week?
 - Illustrations must relate directly to the text. A person with low literacy needs visuals cues, not distractions.
 - Interact with the reader through Q and A or short questionnaires. Interaction aids memory.
- There are several plain-language re-



What's the message? Patients thought this illustration (left) was telling them to take their medication with a shot of whisky. The revised illustration (right) makes it clear that patients should read labels.

principles of plain language, and analysed more than 2000 sets of health care instructional materials for clarity. Their evaluation system, Suitability Assessment of Materials (SAM), provides ratings based on 22 factors in 6 categories: content, literacy demands placed on readers, graphics, layout and typography, learning stimulation and cultural appropriateness.

The Duke University Medical Center had adopted SAM for all of its patient literature. The test takes about 45 minutes, and provides a numerical measure of a document's suitability.

The Doaks offered several plain-language tips:

- Write in terms of behaviour. What

sources for physicians. The National Adult Literacy Database (www.nald.ca) includes a reading-effectiveness tool (indicates grade level) and a thesaurus that supplies simpler words. As well, the Canadian Public Health Association offers a plain-language service for doctors (www.pls.cpha.ca).

Physicians attending the meeting also had a chance to read advice solicited from patients. "They [health providers] shouldn't assume people can fill out these [medical] forms," one wrote. "They should automatically say, 'We have some forms we have to fill out, can I ask you a few questions?', and then fill out the forms themselves." — *Barbara Sibbald, CMAJ*

Almost all physicians have embraced computer use, survey shows

More than 4 in 5 Canadian physicians (84%) now use computers personally, up slightly from 79% in 1999, the CMA's 2000 Physician Resource Questionnaire (PRQ) indicates.

Female physicians, who have traditionally been less likely to use comput-

ers, are now virtually neck-and-neck with their male colleagues. In 1999, 73% of female physicians and 81% of male physicians personally used computers; today the proportions are 83% and 84%, respectively. Rural physicians lag only slightly behind their urban col-

leagues, with 81% reporting that they personally use computers, compared with 84% of urban doctors.

Computer use among physicians aged 65 and over remains unchanged from last year (54%), but for all other age groups the proportion has increased since 1999. The proportion of computer users among physicians younger than 45 is approaching 90%. The PRQ was mailed to a random sample of 8000 physicians. — *Shelley Martin, CMAJ*

A losing battle against child poverty?

The number of children living in poverty is growing despite an all-party federal promise to eliminate the problem by 2000, the Canadian Institute of Child Health says. And it says the ramifications are enormous: 35% of children in low-income families live in substandard housing, and these children are twice as likely to need remedial education programs and are at greater risk of psychosocial problems, injury and death by fire or homicide.

The CICH's recently released report, *The Health of Canada's Children* (third edition), also sounds the alarm over the growing disparity between rich and poor families. In 1981, the richest 10% of families had average incomes of \$122 000 a year; by 1996 this had increased to \$138 000. Meanwhile, the income for the poorest 10% of families remained the same — \$14 000 a year. "It's obscene," said CICH spokesperson Dr. Graham Chance. "You cannot possibly support healthy child development on this income." Indeed, children represent about 27% of Canada's population, yet between 31% and 54% of the people who rely on Canada's food banks are children. Aboriginal children are the most vulnerable, with half of those under age 15 living in poverty. — *Barbara Sibbald, CMAJ*

Clinical Update

New doubts about the diet-and-cancer connection

Schatzkin A, Lanza E, Corle D, Lance P, Iber F, Caan B, et al. Lack of effect of a low-fat, high-fiber diet on the recurrence of colorectal adenomas. Polyp Prevention Trial Study Group. *N Engl J Med* 2000;342:1149-55.

Background

Colorectal cancer is the second most common cancer and the second leading cause of death from cancer in Canada. Over 30 years ago, Burkitt¹ proposed that a high-fibre diet among Africans reduces their risk of colorectal cancer. Since then, much more evidence has accumulated that supports a pathogenetic role of diet in this disease. Observational studies, however, have been inconsistent in demonstrating benefit from a high-fibre diet.

Question

Does a low-fat, high-fibre diet reduce the risk of colorectal adenomas, the precursor lesion of colorectal cancer?

Design

This randomized controlled trial enrolled 2079 patients in 8 US centres. All subjects had had one or more colorectal adenomas removed within 6 months before randomization; none had a history of colorectal cancer. Those assigned to the intervention group received intensive counselling to follow a diet low in fat (20% of total calories) and high in fibre (18 g per 1000 kcal) and fruits and vegetables (3½ servings per 1000 kcal). Members of the control group followed their usual diet. A colonoscopy was repeated 1

year after randomization to remove any adenomas missed at the baseline colonoscopy. A final colonoscopy was then performed 4 years after randomization. The primary end point was the recurrence of adenomas seen at the final colonoscopy; secondary end points were the number, size, location and histologic features of the recurrent adenomas. The endoscopists and pathologists were blinded to each subject's group assignment.

Results

Of the subjects enrolled, 1905 (91.6%) completed the study. Those in the intervention group largely attained their dietary goals, whereas those in the control group continued to consume comparatively higher levels of dietary fat and lower levels of fibre, fruits and vegetables. The incidence of recurrent adenomas was 39.7% in the intervention group and 39.5% in the control group; the unadjusted risk ratio was 1.00 (95% confidence interval [CI] 0.90–1.12; $p = 0.98$). There was no significant difference between the groups in the incidence of advanced adenomas (≥ 1 cm in size or $\geq 25\%$ villous elements or evidence of high-grade dysplasia, including carcinoma). Colorectal cancer was diagnosed in 10 subjects in the intervention group, as compared with 4 in the control group; the difference was not statistically significant (unadjusted risk ratio 2.5; 95% CI 0.8–7.9; $p = 0.19$).

Commentary

This study represents the largest clinical trial examining dietary intervention

in the prevention of colorectal cancer. As found in another study involving supplementation with wheat-bran fibre,² published simultaneously, there was no reduction in the risk of recurrent adenomas or, by inference, colorectal cancer with a diet low in fat and high in fibre, fruits and vegetables. One cannot definitively conclude, however, that dietary modification is ineffective in preventing colorectal cancer. For example, subjects in the intervention group may have exaggerated their self-reported dietary changes, the dietary targets may have been too modest, or the period of follow-up may have been too short to demonstrate benefit.

Practice implications

A diet low in fat and high in fibre, fruits and vegetables does not appear to reduce the risk of recurrent colorectal adenomas over the short term, but such a diet may still be advisable for other health reasons.^{3,4} — Benjamin H. Chen

The Clinical Update section is edited by Dr. Donald Farquhar, head of the Division of Internal Medicine, Queen's University, Kingston, Ont. The updates are written by members of the division.

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Public Health

The hazards of Halloween

A beautiful wedding ceremony this summer was disturbed by the loud and tearful protestations of the 3-year-old flower girl. When her grandfather asked her what was wrong — “Don’t you like your party dress?” — the little girl sobbed and informed him that she really wanted to be a carrot. Apparently she had mistaken the dressing up and pageantry of the wedding for Halloween and had set her heart on being a root vegetable.

Perhaps the little flower girl will get her wish on Oct. 31, when she and thousands of other excited youngsters don costumes, apply makeup and engage in the tricks and treats of Halloween. Over the course of the evening, vampires, ghosts and superheroes of all ages will parade through neighbourhoods, fire stations, school gyms and, not infrequently, hospital emergency departments in their quest for candies and sweets.

Health care workers who have worked in the emergency department on Halloween night know that it can be an exceptional evening for both ordinary and extraordinary presentations. Physicians need to keep their humour in check and proceed with a higher than normal index of suspicion in order not to miss the usual array of chest pains, syncopal episodes and abdominal discomforts disguised in overweight clowns, bedraggled witches, plump pumpkins and spindly carrots. The literature can assist with identifying some of the more unique risks of Halloween: ocular injuries from flying eggs,¹ flatus from Gummy Bears² and intestinal perforations from sewing needles.³

The last category of injury, which occurs when foreign bodies are purposely placed in treats, may be the most publicized Halloween hazard, but a review of available studies indicates that such events are quite rare and the risk may be exaggerated. Observational studies designed to assess the yield of routine radiologic screening of Halloween candy demonstrated the likeli-

hood of finding a radiopaque item to be very low and reported no cases of significant medical problems.^{4,5}

Perhaps we are looking for risks in the wrong places. According to the US Centers for Disease Control and Prevention (CDC), in Atlanta, the main risks on Halloween night are much



Reduce the risk on Halloween night.

more pedestrian and obvious. Children are 4 times more likely to be struck by cars on Halloween than on other nights.⁶ An analysis of childhood pedestrian deaths in the United States from 1975 to 1996 revealed a fourfold increase in the number of deaths on Halloween evening when compared with the same period during all other evenings.⁶

The reasons for this are many and varied. Children are out in the dark wearing dark costumes, many of which restrict peripheral vision and hearing. They also are excited and distracted and tend to take the shortest rather than the safest route when crossing streets and negotiating traffic.

To reduce the risk of harm, the CDC has compiled a common-sense list⁶ of safety tips that should be reviewed before Halloween night.

Pedestrian safety

- Parents should establish a route for children in a known neighbourhood.
- Children should use flashlights, stay on the sidewalk, stop at intersections and cross intersections in a group.
- Motorists should drive slowly and look carefully for children on medians and in alleyways and driveways.
- Children should consider wearing makeup instead of masks, or wear masks that do not obscure sight or hearing.

General safety planning

- Parents should establish a curfew for older adolescents.
- Children should travel in small groups, be accompanied by an adult, visit only well-lit houses and remain on porches rather than entering houses.
- Children should know their phone numbers, carry coins for emergency telephone calls and have their names and addresses attached to their costumes.
- Rigid or sharp costume knives or swords should not be used.
- All treats should be brought home so that parents can inspect them.
- Adults should prepare for trick-or-treaters by clearing porches, lawns and sidewalks and placing jack-o'-lanterns away from doorways and landings. — *Erica Weir, CMAJ*

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