

Restrictions on health worker migration proving problematic

Everybody's working on it, but it's a complex problem and much more needs to be done.

That's the answer you'll get from pretty much anyone you speak to in the international health care community about the issue of health care worker migration from poorer nations to the developed world.

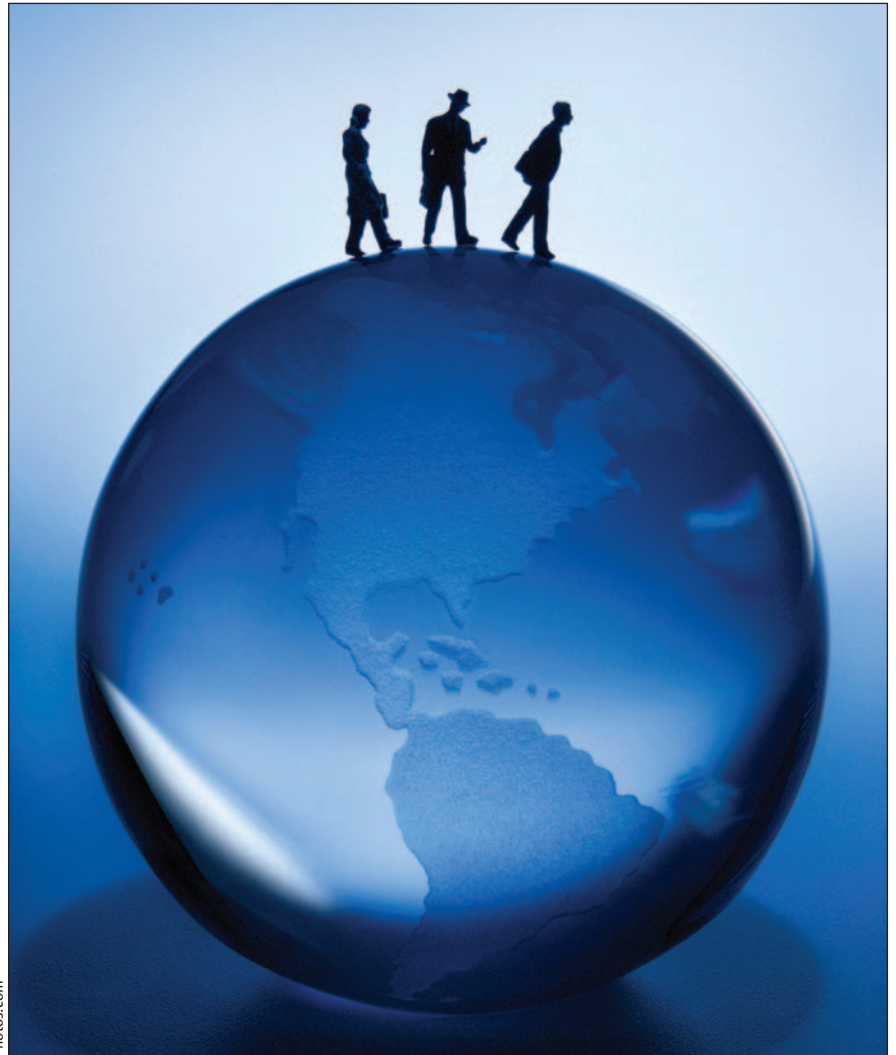
Unquestionably, it is an enormous problem. The World Health Organization (WHO) estimates that the global need for more health care workers currently stands around 4.3 million. Of the 57 countries with critical shortages in health care workers, 36 are in sub-Saharan Africa where diseases like HIV/AIDS, tuberculosis and malaria require an urgent injection of skilled human capital.

And in the face of that need, out-migration from those countries with critical shortages has greatly increased since the 1980s. Many are going to the developed world. On average, 18% of physicians and 11% of nurses now practising in the member-countries of the Organisation for Economic Co-operation and Development are foreign born.

A recent study indicates the number of foreign trained doctors has essentially tripled in member nations over the past 3 decades (*Soc Sci & Med* May 2007;64;1876-91). In some European countries, the average annual growth rate of foreign-trained doctors has reached 10%.

And as the populations of developed countries age — doctors and patients alike — the demand for trained health care professionals will only increase.

Many have charged that the outflow from developing nations, de facto, constitutes a subsidy of wealthier nations. The International Organization for Migration has estimated that developing nations shell out US\$500 million per year to train health workers who leave to



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Restricting migration of health care workers from the developing to the industrialized world is perceived by many human rights experts as a violation of an individual's right to migrate to a nation that provides a higher standard of living and a safer environment for them and their families.

work in North America, Asia or Europe.

It was this sort of daunting information that led the World Health Assembly to launch the Health Worker Migration Policy Initiative in 2004.

The initiative, co-chaired by the United Nations High Commissioner for Human Rights Mary Robinson and Global Health Workforce Alliance Executive Director Dr. Francis Omaswa, was tasked with providing recommendations to WHO member states aimed at helping to develop a "global Code of Practice for health worker migration

that clarifies the responsibilities of both 'source' and 'destination' countries for managing health workforce and migration policies."

Their work follows the lead of several individual countries that have drafted recruitment and migration management guidelines of their own, like the one that exists between the United Kingdom and South Africa, as well as the Commonwealth Secretariat's Code of Practice for the International Recruitment of Health Workers, which Canada supports.

Their work is also being watched carefully by the European Union, which is drafting its own code of conduct.

But while codes of practice are instrumental in focusing attention on the ethical and labour issues involved in health worker migration, they are not legally binding in any way.

“It’s not a treaty. It’s not a legally binding document,” says the Commonwealth Secretariat’s Peggy Vidot. “The countries come together and adopt these documents by consensus. ... This means that federal governments agree not to recruit ... but private agencies are not in active government.” They are therefore not bound to follow the rules.

Vidot says it’s a complex issue that will need multifaceted solutions and require a range of actions from the local to the global level to develop a framework in which migration can take place.

One reported result of existing codes is a domino effect. According to a report written for the Migration Policy Institute, the United Kingdom has replaced many of its health professionals who have migrated to North America with German health care workers. Germany, in turn, is bringing in a growing number of physicians from the Czech Republic. The Czechs are coping by recruiting from Slovakia. And so on and so on.

And if the much larger economic issues of “source” or “push” countries are not addressed at the same time as the codes are established, the codes will have very limited impact.

The simple fact is, the ability to migrate to a country that provides a better standard of living, access to a safe workplace and better opportunities for continued training are human rights that cannot be restricted. You can’t tell a doctor in an impoverished and war-torn country such as Rwanda that he can’t relocate to a safer, more prosperous country. You can’t force someone to stay and attempt to work in a place that is lacking even minimum provisions for them to do their job.

“If you tell them they can only hand out band-aids and aspirin, no one will stay,” says Dr. Otmar Kloiber, secretary general of the World Medical Association. “People should have the privilege

to migrate. For medical workers it’s important to have exchanges in order to learn and to work. You can’t put someone on a dead end road and ask them to build a health care system.”

Kloiber says decades ago the German government restricted recruitment to training-only, requiring students to then return to their homelands. “But there are problems with this because then students complain that they can’t find a job at home.”

He says there’s no ideal model yet and that policy has to be redeveloped to include personal safety, decent working conditions, livable wages and access to training — basically, a massive overhaul that would shift developing countries’ economies from agriculturally based to service based and strengthen their entire health care systems.

“And this is not something that we can do alone,” says Kloiber. “They have to help themselves as well. ... We can try and steer the obligations of the [aid] recipient countries to provide better health care for their people but without their participation, nothing will change.”

Kloiber says there must be serious investment in health care and the International Monetary Fund and the World Bank must understand their place in providing aid and direction as well. “If you look at the richness of countries, this should not be insurmountable. Some places are spending a hell of a lot of money on weapons. Perhaps they need to focus on the well-being and survival of their people instead of new wars with their neighbours.”

The Health Worker Migration Policy Initiative is set to present a framework and recommendations for the Global Code of Conduct to the World Health Assembly in May 2008. That will follow presentations at the Global Forum on Human Resources for Health in Kampala, Uganda and at a high-level WHO-Organisation for Economic Co-operation and Development meeting dedicated specifically to health workforce migration in Geneva, Switzerland. A Global Forum on International Migration and Development is also being held in the Philippines in October 2008.

Given the philosophic complexities and the number of countries involved,

as well as the raft of international stakeholders and organizations, including the International Labour Organization, the World Health Assembly will do well to have the code of conduct in place by 2009. — Christina Lopes, Paris, France

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Coming next issue: recruiting foreign doctors to Canada.

Canada increasingly reliant on foreign-trained health professionals

For several years, Canada has been trying to cope with a chronic shortage of health professionals. Like many other developed nations with similar deficits in domestic health workers, poor human resources planning, an underinvestment in education and an aging workforce are to blame.

While the graduates of international programs may offer a quick fix, many argue that it is unethical for Canada to bring health professionals from the developing world, particularly countries burdened with their own health worker shortages and weakened by epidemics (see page 265).

Although the number of working nurses, pharmacists and dentists in Canada continues to rise, so too does the gap between the supply and demand of health professionals. The nursing shortage is projected to grow to 113 000 by 2016 and there are already 2000 unfilled pharmacist positions across the country. Some health authorities currently have up to 10% of their pharmacist positions vacant, says Jeff Poston, executive director of the Canadian Pharmacists Association.

While there are sufficient paramedics, medical radiation technologists and dentists nationally, there are geographic shortages outside of major metropolitan centres and in some provinces,

such as British Columbia, Newfoundland and Labrador, and Saskatchewan.

In 2006, more than 20 000 licensed practical nurses and registered nurses working in Canada (not including Quebec) had graduated outside Canada. At the top of the list — with more than 6000 graduates — was the Philippines, followed by the United Kingdom, the United States, India and Hong Kong. The proportion of internationally educated registered nurses grew from 7% (15 659) in 2001 to 8% (19 230) in 2005.

According to the Canadian Pharmacists Association, international pharmacy graduates made up 20%–30% of Canada's pharmacy workforce. More than one-third of graduates who complete the qualifying exams are foreign-trained and about half of the newly registered pharmacists in Ontario were originally trained overseas. They emigrated from Egypt, the United States, India, Pakistan, the Philippines, the United Kingdom, South Africa, the former Yugoslavia and Korea. "We are not self-sufficient," says Poston. "We are increasingly reliant on pharmacists that have been trained overseas."

As of 2001, 18 590 dentists were working in Canada, a 36% increase over 1996. "Overall, if you look at the number of dentists in Canada ... there are enough," says Darryl R. Smith, president of the Canadian Dental Association. However, there are geographical shortages in Saskatchewan and Newfoundland and Labrador. About 20% of Canadian dentists migrated here in the last 5 years. But that proportion is likely decreasing, says Smith, due to 2000 regulations that require all graduates of dental programs outside of North America to take a 2-year qualifying program before they can practise.

That same year, a census recorded 14 870 medical radiation technologists in Canada, a 2% decrease from 1991. Although some provinces experienced increases in the number of technologists, Alberta, British Columbia, Newfoundland and Labrador, Nova Scotia and Manitoba all experienced 2%–26% decreases in the workforce. Only a small proportion (3%–4%) of technologists migrated to Canada within the last 5 years. Although it is less acute than it has been, the shortfall is expected to grow,



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More than 20 000 licensed practical or registered nurses working in Canada were educated abroad.

says Anne Robertson, director of professional practice for the Canadian Association of Medical Radiation Therapists. "Fewer people retired than expected, but they will be retiring in the near future."

How internationally trained health professionals wind up in Canada remains a bit of a mystery. Some are actively recruited, others respond to advertisements posted on Canadian websites or follow friends and family.

The targeted recruitment of health workers from developing countries through advertisements in local journals and onsite dinner-and-drinks information sessions is widely frowned upon. Several organizations, including the World Health Organization, have launched efforts to encourage the ethical recruitment of health workers. In 2003, the Commonwealth Secretariat introduced a code of practice to discourage the targeted recruitment of health workers and to safeguard the rights of these recruits. The code, however, is not a treaty so nothing in it compels provincial governments, regional health authorities, hospitals, pharmacies or any other pri-

vate organization to abide by its terms.

The United Kingdom's National Health Service adopted guidelines for employers recruiting health professionals and working with international recruiting agencies, and it maintains a list of developing countries that should not be targeted for recruitment. Health Canada says it does not keep such a list because the provincial and territorial governments are responsible for organization and delivery of health care services within their jurisdictions.

Most recruitment occurs at the level of the regional health authority. In recent years, regional health boards have recruited nurses from the United Kingdom who faced layoffs, and from the Philippines, where they train excess nurses, says Canadian Nurses Association President Marlene Smadu. "Canada's reputation is pretty strong ... [we're] credible in practising what we preach."

The editorial in this issue of *CMAJ* (page 265) criticizes Shoppers Drug Mart for "poaching" pharmacists from South Africa. From Nov. 26 to Dec. 8, 2007, the drugstore chain held information sessions and interviews in Pretoria, Johannesburg, Durban and Capetown for pharmacy graduates interested in "operating their own pharmacy business in Canada." Shoppers Drug Mart has recruited 30 pharmacists from South Africa since 2005.

In an email to *CMAJ*, John Caplice, senior vice president at Shoppers, said the company did not intend "to 'poach' or damage the health care system of any other country, nor have we done so." Shoppers officials have agreed to review their policy on attracting foreign-trained pharmacists and will consider providing educational support and professional practice training to these communities.

Poston says the perception that pharmacists are actively recruited is overplayed. "The entry into pharmacy practice in Canada is pretty passive — it's linked to families that are already here." But the pharmacists association has yet to take a formal position on active recruitment. "It's difficult to endorse a major international treaty that Canada hasn't signed," Poston adds. — Hannah Hoag, Montréal, Que.

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US considers establishing behind-the-counter drugs

In November, Health Canada received a last-minute invitation to a hearing on whether the United States should approve a new class of drugs for behind-the-counter sales.

United States Food and Drug Administration (FDA) spokesperson Chris Kelly says his agency wanted to know the perspective of the Canadian government, which made sense on the surface: behind-the-counter drugs, provided after discussion with a pharmacist but requiring no prescription, have been part of Canada's national drug schedules since 1995.

But it's not clear how much the United States can learn from this country's experience. Health Canada decides whether a drug is prescription-only and the National Association of Pharmacy Regulatory Authorities and its provincial and territorial counterparts classify non-prescription drugs as over- or behind-the-counter, but Brigitte Zirger of Health Canada's Therapeutic Products Directorate says the Canadian model can't be easily replicated south of the border. The pharmacy regulator's executive director, Karen Wolfe, says "it's very difficult to draw parallels" between the 2 countries' drug regulatory systems.

Drugs kept behind the counter in Canadian pharmacies include EpiPens, Polysporin eye or ear drops, the strongest lice shampoos and Tylenol No. 1 with codeine. Pharmacists counsel patients about the use of the drugs and are reimbursed for their time through dispensing fees that are established by the provinces, a mechanism that serves the public "very well," says Canadian pharmacist Sana Sukkari, of the Lake Erie College of Osteopathic Medicine in Pennsylvania.

Wolfe agrees. "It's a greater barrier for me in Canada to try and get a prescription from a physician than to walk into a pharmacy and have a dialogue with a pharmacist," she says. But in speaking to the FDA at the November hearing, Health Canada's Zirger underscored the differences between the 2 countries. Projecting a brightly coloured map of Canada, she said her aim wasn't to promote tourism, but to show that Canada's system operates in a country with only 13 provinces and territories and could be unwieldy in 1 with 50 states.

American pharmacists support the idea of behind-the-counter drugs, according to recent polls by pharmacists' professional associations, but they want a new scheme for payment. The dispensing fees paid by health care insurers don't cover the costs of counselling by

pharmacists and as a result, some doctors claim, shoppers interact mostly with pharmacy technicians.

Despite this, Kelly says the FDA believes "many consumers are supportive" of a behind-the-counter class of drugs. Not surprisingly, the American Medical Association and other medical groups are strongly opposed and have argued against the need for a new class of drugs, just as the Canadian Medical Association argued against Canada's behind-the-counter classification scheme when it was first proposed here in 1995.

Dr. Joseph Cranston, the American Medical Association's director of science research and technology, testified in November that the association believes that "when a drug is not safe for use by consumers without supervision ... then a physician who is adequately trained to evaluate and diagnose disease and is licensed to prescribe drugs should be responsible for supervising the use of that drug." Cranston added the FDA lacks statutory authority to approve behind-the-counter drugs since the classification isn't established by federal law.

However, a consumer advocacy group claims the debate in the United States is more than a turf battle between doctors and pharmacists. Dr. Sid Wolfe, head of the health wing of the consumer group, Public Citizen, told the FDA in November that "the current push for a behind-the-counter class was precipitated recently by drug companies who make statins and want to switch them to 'over the counter.'"

That switch has been the subject of several FDA meetings, including 1 on Dec. 13, 2007, when Merck requested over-the-counter status for a 20 mg dose of lovastatin (Mevacor). Merck's request was rejected by a vote of 10 to 2, marking the third time that an FDA advisory committee has rejected this proposal for lovastatin. In 2005, committee members heard that statins are sold from behind-the-counter in England. Wolfe says companies that manufacture statins want the option of behind-the-counter sales in the United States, since the FDA and its advisors might be more willing to approve behind-the-counter status than over-the-counter. The stakes are high: the



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The American Medical Association is opposing the creation of a Canada-like category of behind-the-counter drugs, which pharmacists could dispense without a doctor's prescription.

prescription-only statin market in the United States was valued at more than US\$21 billion in 2006.

Merck spokesperson Ron Rogers says his company is only interested in over-the-counter status for its drug and hasn't been part of the debate for a new, behind-the-counter classification. But executives at GlaxoSmithKline had seemed optimistic that statins would be sold without a prescription. Two weeks after the November hearing on behind-the-counter drugs, Glaxo, Europe's largest drug maker, announced it had purchased the rights from Merck to market lovastatin in the United States if the drug is approved for non-prescription sales. That seems unlikely now, given the advisory committee's vote in December.

But the FDA may still act to establish a behind-the-counter category. Spokesperson Chris Kelley says that after public comments on the issue are reviewed, the next step could be a recommendation or an administrative action. — Miriam Shuchman MD, Toronto, Ont.

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Testing the functionality of new medical devices

It's a scenario likely repeated daily across the country. A hospital needs new pieces of equipment that will cost millions of dollars and have to remain in use for a decade or more.

Competing vendors each proclaim their products is not only the best technically, but also the easiest and safest to operate. To sort out such claims in the past, a hospital might have asked a staff expert to try out the new machinery or sent someone to observe it in use.

But for the last 3 years, institutions have increasingly been turning to the Healthcare Human Factors Group of Toronto's University Health Network for an objective evaluation of the "usability" of competing devices.

Their success at identifying which of several similar machines is most likely going to lead to medical error — particularly when used in an often fre-

netic hospital setting — has allowed the group to become the world's largest hospital-based usability/ergonomics/human factors (these terms are used interchangeably) laboratory.

Housed in a \$6-million facility, the lab now employs 10 full-time staff and 5 graduate students. The not-for-profit Healthcare Human Factors Group claims that one of its great strengths is its access to 3000 University Health Network nurses and 1000 doctors as test subjects.

One classic example of the group's work involved a deliberation by several Toronto-area hospitals over which of 4 competing automatic external defibrillators to buy. All the machines were theoretically so simple to operate that manufacturers had been promoting them as an ideal technology for ordinary people responding to heart attacks in airports and schools.

But the reality was starkly different. In a simulated emergency, simply getting a machine out of its case proved an embarrassing complication. During the test, nurses who were unfamiliar with the device couldn't find the latch that unhooked its carrying case. Others couldn't figure out which of 2 zippers to unzip to take a different machine out its case.

This fumbling could have potentially fatal consequences, points out Anjum Chagpar, manager of the Healthcare Human Factors Group. "With every minute that passes, there is a 10% decrease in the likelihood of a successful resuscitation."

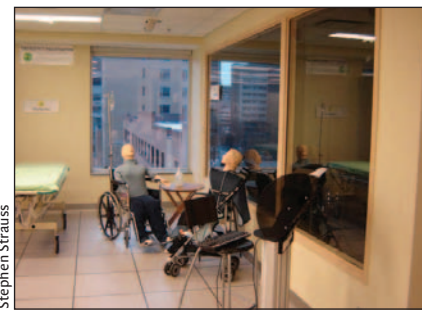
Not only did the tests convince the hospitals which device to buy, it made them aware of how subjective and flawed their initial impressions had been.

Dr. Rick Cooper, who was a participant in testing 3 devices by Chagpar's team, says they went into the evaluation with a "bias based on the specifications of a device and our impressions when we or when experts handled the devices. After the tests were conducted, this was completely turned around," says Cooper, a professor of anesthesia at the University of Toronto. "Our first choice had previously been ranked as fourth."

This sort of ranking is not something that all companies necessarily want. "Some have said we don't want

our product evaluated, and we don't care if you purchase it," says Chagpar.

Other vendors have had to be removed from viewing the test procedures behind 1-way glass because they became agitated watching nurses and doctors make potentially dangerous errors, says Joseph Cafazzo, the University Health Network's director of medical device informatics and health-care human factors team.



Stephen Strauss

The props take a break at the Toronto-based University Health Network's device usability testing laboratory.

Despite the corporate concerns, the lab has become a usability test bed for hospitals and health ministries across the country, as well as for governments and manufacturers elsewhere.

A shining example of the latter is the new "smart" pump-infusion system that the facility helped develop with the American arm of Smiths Group PLC, a London-based company. The process started with pencil and paper drawings; 10 iterations and 2 years of work resulted in a full-fledged machine that is currently awaiting U.S. Food and Drug Administration (FDA) approval.

The cost for the group's services ranges from \$10 000 to \$50 000, depending on the number of devices and their sophistication. The test results are shared with clients, and Chagpar says they hope to start publishing results in peer-reviewed journals in the future.

In a larger sense, the team's efforts represent a realization that human error in operating a device can be a major cause of patient death and injury in an age of sophisticated machinery.

A driving regulatory force has been the FDA's 1997 adaptation of a general principle that required medical manu-

facturers to “demonstrate adherence to good design practices.”

This has since been expanded into what is known as the IEC 60601-1-6 design code, which sets a similar standard for the usability of medical devices around the world. To meet the standard, companies need both human factors skill and objectivity about their failures.

Tom Ulseth, Smith’s worldwide marketing manager, says “There is a lot of value to an objective perspective like that which Toronto brings. When you bring work inside it becomes too close to you, you become too biased about it working.”

To which Cooper adds: “The devices shouldn’t be evaluated by engineers, that is by the people who are designing them. They should be evaluated by the people who are using them.” — Stephen Strauss, Toronto, Ont.

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The search for integrity in the cosmetic surgery market

The death of a Toronto woman from complications following liposuction has prompted Ontario to undertake a wholesale review of the regulation of cosmetic and aesthetic surgery, and sparked a national debate over which physicians should be allowed to perform invasive procedures.

In September, 32-year-old real estate agent Krista Stryland died following liposuction performed by Dr. Behnaz Yazdanfar of the Toronto Cosmetic Clinic. Yazdanfar is a family physician with no formal surgical training who claims on her website to perform a wide range of invasive procedures, including breast surgery, liposuction and tummy tucks.

In the aftermath of Stryland’s death, it was revealed that the College of Physicians and Surgeons of Ontario has failed to act after struggling for years with the issue of cosmetic surgery performed by physicians with no formal surgical training.

College President Dr. Preston Zuliani acknowledged that more could have been done to deal with the issue of

unqualified physicians performing cosmetic procedures. The college is now fully committed to a plan of action that ensures only qualified plastic surgeons can perform such invasive procedures.

“In retrospect, might we have been more aggressive, earlier?” Zuliani inquires. “Yes, that’s a fair statement. But I think we’re making up for it now. We consider this to be a very important issue of public safety and public trust.”

Following Stryland’s death, the college canvassed the more than 2400 members to determine the extent to which doctors may have expanded their practices to include cosmetic and aesthetic procedures without having obtained appropriate training. It is believed several hundred doctors, mostly family physicians, have been advertising themselves as “cosmetic surgeons,” but have not been telling patients they are not formally qualified to perform surgery.



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The lucrative and burgeoning area of cosmetic surgery has enticed some family physicians into the field, while also luring a few charlatans and hacks, including an unlicensed husband and wife team who performed home-based liposuction on a Massachusetts woman. She died, as did Toronto real estate agent Krista Stryland, after being operated on by a family physician with no formal surgical training.

By late December 2007, the college had notified 16 physicians that they are being investigated to determine if they are qualified to offer these medical services. Some 20 others who haven’t answered a college questionnaire about their qualifications had until the end of 2007 to respond or their licenses could be suspended.

The college has declined to identify the physicians, or indicate whether they have been asked to cease all invasive cosmetic procedures, until the investigation is completed.

A college committee of experts is also drafting recommended changes to provincial legislation that would expand the association’s regulatory authority and ability to shut down facilities that do not meet basic medical standards.

Plastic surgeons, who have long lobbied provincial colleges to impose restrictions on physicians advertising themselves as cosmetic surgeons, applauded the efforts but lamented the fact that cosmetic surgery remains unregulated in most Canadian provinces.

Dr. David Kester, president of the Canadian Society for Aesthetic Plastic Surgery, said only British Columbia and Alberta now regulate cosmetic procedures. The former initiated a rigorous regime in the early 1990s to rein in a growing number of private surgical clinics.

In Ontario, however, Kester says a family physician only needs to notify the provincial college that they are changing the scope of their practice and then meet with a mentor who assesses their ability to perform the new procedures. Most plastic surgeons consider that an inadequate assessment of ability to perform complex, invasive procedures, he adds.

Dr. Gordon Wilkes, president of the Canadian Society of Plastic Surgeons, says most so-called “cosmetic surgery” procedures are actually extensions of complex reconstructive surgery that plastic surgeons train for years to perfect. Despite this, aggressive advertising by cosmetic surgeons attempts to convince prospective patients that procedures are simple and risk free.

“There is no integrity in the marketplace,” Wilkes says. “The public confuses cosmetic surgery with plastic sur-

Cosmetic surgery becoming the cash cow of medicine

Unregulated cosmetic and aesthetic surgery is a worldwide concern as both the number of doctors entering the lucrative field and the number of patients demanding cosmetic procedures has grown exponentially.

At the same time, however, the number of deaths from improperly performed procedures also appears to be growing.

Deaths from cosmetic surgery procedures, including tummy tucks and liposuction, have been reported from Australia to the United Arab Emirates. Meanwhile, many developing countries such as Vietnam and Thailand are reporting explosive growth in the number of clinics providing cosmetic surgery. The internet is rife with advertisements for cosmetic surgery clinics all over Asia and South America that offer cut-rate procedures mostly to patients in North America and Europe.

Venezuelan President Hugo Chavez used a television address last year to angrily denounce the growing number of physicians and surgeons willing to perform cosmetic procedures on teenage girls, in a nation obsessed with beauty pageants.

The Australian Society of Plastic Surgeons lashed out in December 2007 at a group of self-described cosmetic surgeons advertising half-price liposuction to patients willing to act as “live guinea pigs” for liposuction trainees, many of whom have no experience as surgeons. Society President Dr. Howard Webster acknowledged that in Australia right now, “any [general practitioner] can call themselves a cosmetic surgeon.”

In the United States, the industry is regulated on a state by state basis, and as a result, there is a broad array of approaches, from highly regulated to completely unregulated. But even in states with strict regulatory regimes, there has been a proliferation of cases involving unqualified physicians performing home-based cosmetic surgery.

In November, New Jersey police investigated the death of a 41-year-old woman who apparently underwent cosmetic surgery at a private home in Morganville. The case followed another tragedy involving a Massachusetts woman who died after a home-based liposuction procedure performed by a Brazilian husband and wife team who were not licensed anywhere in the United States as physicians.

California officials, meanwhile, are investigating the death of Dr. Donda West, mother of rap singer Kanye West, who died in November following a tummy tuck and breast reduction surgery at 1 of Hollywood’s most popular cosmetic surgery clinics. News reports confirmed that West, 58, had been previously turned down by another cosmetic surgeon because she had not been able to acquire a medical clearance certificate, which is standard practice in California for patients over the age of 40 who suffer from obesity.

News @ a glance

Island medicine: Hoping it will yield a recruiting edge, Prince Edward Island will invest \$1.2 million per year to create 5 family medicine residencies each year on the island in conjunction with Dalhousie University’s Faculty of Medicine, starting in July 2009. “Medical residents who trained here and become familiar with the Island way of life, and style of medical practice, have the highest potential to stay,” provincial Health Minister Doug Currie said.

Ebola strain no. 5: The World Health Organization says a new form of the deadly Ebola virus has been detected in a major outbreak of the hemorrhagic fever in western Uganda. According to a Médecins Sans Frontières exploratory mission conducted last month, some 115 new cases of Ebola fever, and 31 deaths, had occurred as of Dec. 11, 2007. There is no known treatment for Ebola fever, which has a mortality rate of 50%–90%.

Big stick: The Alberta legislature wrapped up its fall sitting by passing new legislation that curbs self-regulation by 28 health care professions in the province. Controversial Bill 41 has been assailed by the Alberta Medical Association as nothing less than “draconian” because it empowers the minister to reduce educational requirements, permits censorship of physicians and threatens patient privacy (*CMAJ* 2007;177[11]:1342).

Never events: American style fines for medical negligence and hospital errors should be levied when patients suffer harm and need additional medical care and extended stays in hospital, says England’s Chief Medical Officer Dr. Liam Donaldson. “Why should the health service, funded by the taxpayer, pay for the care of a patient that’s had bad care,” Donaldson asked following the release of a United Kingdom National Patient Safety Agency report that indicated there were 700 000 “patient safety incidents” in 2006/07, resulting in nearly 3000 deaths. — Wayne Kondro, *CMAJ*

gery. And the term cosmetic surgery is thrown around a lot despite the fact it is not a term that has a lot of integrity for licensing and accreditation bodies.”

Zuliani notes 1 problem is that most provincial colleges are created by provincial legislatures, which are primarily interested in the regulation of insured medical procedures performed in public facilities.

Kester says many people within the medical establishment have long considered cosmetic procedures to be unworthy of regulation, only to be forced to confront the issue after a patient dies

unnecessarily. Others cast the dispute as a “turf war” and reject arguments that only plastic surgeons should perform cosmetic surgery.

“It’s always been a trivialized area of medicine, and not thought of as real surgery,” says Kester. “That attitude has contributed to this problem. The fact is, a tummy tuck is every bit as stressful and risky as having your uterus removed. It’s a 2 to 3 hour procedure with all of the complications of major surgery.” — Dan Lett, Winnipeg, Man.

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Lack of pharmacological training causes overuse and misuse of drugs

Keeping up with the latest drugs on the market is no small feat for any doctor at the best of times.

With more than 20 000 drug products on the market in Canada, it can be overwhelming, even for physicians who are determined to remain current with the medical literature on prescription drugs.

And with more than 400 million prescriptions written every year in Canada (at a cost of \$24 billion), there is ample room for error. According to Dr. Jean Gray, professor emeritus of medical education, medicine and pharmacology at Dalhousie University, problems occur “across the board” in part because physicians aren’t getting adequate pharmacological training.

Family physicians and specialists alike get “into trouble” when prescribing drugs, Gray says.

The extent of overuse, underuse or misuse of prescription drugs is, however, difficult to assess. “It exists. But whether it’s getting worse or better is difficult to say,” she adds. “There’s no mechanism to collect that information in Canada.”

Equally problematic, Gray says, is the fact that clinical pharmacology, a discipline that promotes safe and effective use of medicines, is not getting the attention it deserves in medical schools. It’s a concern often-expressed, most recently in a highly-touted November report, *Safe and Sound: Optimizing Prescribing Behaviour*, in which the Health Council of Canada raised flags about prescribing practices in Canada. The report questioned whether doctors had the required training and sufficient exposure to clinical pharmacology to safely prescribe drugs.

“The concern is that people are going out in practice without a comprehensive understanding either of how drugs work or how to use them more rationally in a therapeutic situation,” says Gray.

The result can be dangerous or even deadly.

As a bare minimum, trainees should understand how drugs work,



Just 4 of Canada’s 17 medical schools have a required course in clinical pharmacology.

how to prescribe them, and how to monitor patients and adjust medication when “patients don’t fit the mould,” Gray says.

According to the Royal College of Physicians and Surgeons of Canada, clinical pharmacology is a required course in only 4 of Canada’s 17 medical schools.

However, all students and residents do receive some pharmacology training, says Dr. Deborah Danoff, the director of the college’s Office of Education.

“In residency training, all trainees receive education about therapeutics, including prescription medication,” she says. “Residents are trained in reading the literature so when they go into practice, they can read about new drugs and understand the benefits and disadvantages of new drugs. ... It’s a required component.”

Once in practice, doctors also have to keep up to date to maintain their certification, Danoff adds.

Still, there is room for improvement. The college is in the midst of changing the rules so that residents in 5 primary disciplines — internal medicine, emergency medicine, anesthesiology, pediatrics and psychiatry — will have to take the 2-year clinical pharmacology program as a prerequisite for certification.

They’ll also have to write an exam. Presently, students merely receive an attestation stating they’ve completed the program.

The exam will be gradually phased-

in. In the fall of 2008, residents will have the choice of taking the written exam, or receiving an attestation stating they’ve completed the program.

But this program doesn’t address concerns about physicians already in practice.

There’s no way of knowing if a doctor has kept up with the literature on new drugs once he or she has been in practice for say, a decade, says Dr. Ed Schollenberg, Registrar of the College of Physicians and Surgeons of New Brunswick. Newly trained doctors “rarely come to our attention,” he says. “At our office, experience has shown there is no problem in the first 5 years.”

Problems only surface if there is a patient complaint or a random review at a doctor’s office by the college. “It’s passive. We wait for the phone to ring.”

The Health Council argued that academic detailing programs (*CMAJ* 2007; 176[4]: 429-431) are an excellent means of enhancing a physicians training. Under such programs, physicians get balanced information from an independent source during a one-on-one encounter at the doctor’s office, says Dr. Michael Allen, director of the Dalhousie Academic Detailing Service. “From educational research, the indications are there is an immediate effect of 6% improvement in prescribing behavior or patient outcomes per topic.” — Huguette Young, Ottawa, Ont.

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FOR THE RECORD

Parliament adopts

Jordan's principle

In an altogether rare demonstration of legislative unanimity, Parliament voted to adopt what has come to be called "Jordan's Principle" in resolving healthcare disputes involving First Nations children.

Although not legally binding, the principle advocated by the First Nations Child and Family Caring Society of Canada and 400 other organizations, and embodied in New Democrat Member of Parliament Jean Crowder's (Nanaimo-Cowichan) private member's motion calls on governments to adopt a "child first" approach to resolving jurisdictional disputes involving the care of children like 4-year-old Jordan River Anderson. As governments squabbled over who was financially responsible for Jordan's care, he languished and eventually died of a rare neuromuscular disorder while living in a Winnipeg hospital, far removed from his family and home on the Norway House Cree Nation reserve.

CMAJ threw its weight behind the legislation last August in an editorial urging that the medical needs of First Nations' children be the prime consideration in such intergovernmental disputes. If governments "ignore Jordan's Principle and entangle themselves in financial or jurisdictional battles first, the governments deserve to be sued," stated the editorial (*CMAJ* 2007;177[4]: 321).

A recent study indicated that as many as 400 Aboriginal children annually are caught in similar disputes.

The final vote in Parliament? 262-0.

Ontario fails to adequately monitor public drug provision

Overbilling by pharmacies and lax medication practices at long-term care facilities were among findings in the annual report of Ontario's spending watchdog.

Ontario fails to adequately monitor pharmacies in their provision of drugs for seniors, welfare recipients, the dis-

abled and others eligible for assistance under various programs, Auditor-General Jim McCarter stated in his 2007 report on government spending.

McCarter's review found that more than 30% of claims exceeded Ontario Drug Formulary prices by more than 100%. In 1 case, a pharmacy's claim exceeded the formulary price by 12 500%, so the Ministry of Health and Long-Term Care paid nearly \$2400 for a claim that should have cost less than \$20. In another instance, a pharmacy made 300 claims in 5 months for 1 ineligible individual. Less than 3% of pharmacies are inspected. Selecting 1 for review, McCarter found that it claimed \$270 000 in overpayments, including

\$240 000 for invalid dispensing fees.

The report also raised major concerns about medication management practices at long-term-care homes, including failure to obtain informed consent from patients for the use of new medications, inadequate reporting of medication errors and inadequate processes to ensure that medications that approach their expiry date are removed.

Among the findings was that "91% of the 18 000 level-1 alerts (which warn of a drug combination that is clearly contraindicated and should not be dispensed or administered) generated by pharmacy computer were overridden and the drugs dispensed to residents of 421 long-term-care homes."

Parliament's remarkable isotope fiasco

It is difficult to imagine how Parliament, when it resumes this week, could possibly top the level of spectacle that characterized its final week of pre-Christmas sittings. It featured the mudslinging antics of former prime minister Brian Mulroney and Karlheinz Schreiber, as well as government passage of emergency legislation to override the safety concerns of Canada's nuclear watchdog and reopen the nuclear reactor that produces isotopes for medical imaging.

In the latter instance, there was absolutely no shortage of grandstanding: Prime Minister Stephen Harper accused Canadian Nuclear Safety Commission President Linda Keen of being little more than a Liberal Party shill determined to compromise the health of Canadian patients by denying them access to radioisotopes used in diagnostic tests.

Meanwhile, the crown corporation Atomic Energy of Canada, which operates the Chalk River, Ontario, reactor, was revealed as a manager that flat out ignored the conditions of its licence by essentially refusing to connect 2 coolant pumps to an emergency power backup.

As hospitals struggled to cope with isotope shortages (or at a minimum, were unable or unwilling to invest in more expensive isotopes produced abroad) and patient backlogs began mounting, it also became painfully apparent that the government lacked a national backup plan to obtain isotopes in the event of shutdown or mishap (e.g., fire, earthquake) at Chalk River, which apparently supplies over one-half of the world's technetium.

Almost entirely lost in the brouhaha was any element of discussion of the balance between acceptable levels of nuclear risk and the health risks, and consequences, accruing for Canadians from a shortage of isotopes.



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The Chalk River reactor purportedly produces two-thirds of the world's supply of technetium.

WHO speaks out on global health challenges

The following is an excerpt from the 2007 David E. Barmes Global Health Lecture, delivered by Dr. Margaret Chan, director-general of the World Health Organization, in which she advanced the arguments that the world's ability to handle health challenges rests upon the capacity of local health system infrastructure.

"Industrialization of food production, globalization of the food supply and its distribution and marketing channels mean that all of us are in-

creasingly eating similar unhealthy diets. With the massive move to cities, lifestyles are increasingly sedentary. Obesity has gone global.

Chronic diseases, long considered the companions of affluent societies, have changed places. They now impose their heaviest burden on low- and middle-income countries. Here is 1 example. In Cambodia, a least developed country, 1 in 10 adults now has diabetes and 1 in 4 adults has hypertension.

The rise of chronic diseases and the demands of chronic care are placing an almost unbearable strain on health systems. The costs for impoverished households can be catastrophic. In part of rural China, for example, 30%–50%

of poor farmers cite ill health or the costs of chronic care as the root cause for their poverty.

Two conclusions are obvious. If we want better health to work as a poverty reduction strategy, we must reach the poor. If we want health to reduce poverty, we cannot let the costs of health care drive impoverished households even deeper into poverty.

Public health has been given a big push forward, but it is still an uphill climb. Here is the reality. Interventions and money will have only a limited impact in the absence of adequate delivery systems." — Wayne Kondro, *CMAJ*

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DISPATCH FROM THE MEDICAL FRONT

Appropriate applause procedures

It seemed a windfall to our multinational group of 8. Our grand foray to the Great Wall of China was to be interrupted by an unscheduled stop at the world-renowned Imperial Academy of Natural Chinese Medicine.

We were greeted warmly by a pair of attractive young women in freshly starched lab coats, ushered into a classroom, served a hot beverage made from "health giving" plants and treated to a lecture lauding Chinese traditional and natural medicine. We learned about Yin and Yang, the efficacy of acupuncture and the incomparable excellence of hospital staff.

Then, as a special gift, we "Western visitors" received a free personal examination from 2 of the academy's most renowned professors: 'A' and 'B'. They arrived, dapper in suits and lab coats. The 2 attractive women encouraged us to clap. Disappointed by our lack of vigour, A instructed us to clap louder.

He motioned me forward. The translator ordered me to extend my hand, palm up, on a soiled pink satin cushion. My pulse was taken, my tongue scrutinized. A asked my age and gravely inquired about my current medications. A look of disapproval crossed



Traditional Chinese medicine is based on various belief systems.

his face when I told him that I did not take anything.

"Very serious," he intoned. "You have overheated liver, sluggish circulation and thick blood."

I protested that I felt very well.

"Very serious," the interpreter repeated. "No energy, fatigue, dry mouth and sometimes forget things."

A sadly shook his head.

Again I protested: the weather was hot, my energy excellent, my memory good.

"Sometimes," he implored, "the most serious of medical conditions seem like that until it is too late. You need urgent treatment."

I explained that our bus was moving on. He urged that I "look after my health before it was too late. ... Hundreds of my patients come to my hospital from North America before it is too late."

I was clearly not a good patient.

Other tourists were summoned forward. A Mexican physician was diagnosed with "serious womb and period problems." Also of a noncompliant bent, she was swiftly discharged, as was another Canadian physician suffering "sluggish circulation, hypertension, thick blood and developing diabetes." He protested that he felt well and recent lab work was normal.

But a muscular, 35-year-old dental technician proved more responsive. Advised that he was "seriously ill, hypertension, sluggish circulation, and on the verge of getting diabetes," he forked over US\$300 for a football sized bag of dried herbs. He was instructed to return, "without fail," in 3 months. He looked worried! — Donna Stewart, MD, Toronto, Ont.

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CMAJ invites contributions to Dispatches from the medical front, in which physicians and other health care providers offer eyewitness glimpses of medical frontiers, whether defined by location or intervention. The frequency of the section will be conditional on submissions, which must run a maximum 350 words or be subject to our ruthless editorial pencils. Forward submissions to: wayne.kondro@cma.ca