FOR THE RECORD

The state of northern health

Northwest Territories (NWT) residents must take more responsibility for the unhealthy life choices they make, as they are increasingly at risk of obesity and chronic illness, a five-year report on the territory's health status argues.

Residents of the north are doing less to maintain or improve their health through diet and exercise than in the past, although there have been improvements in some health indicators, including lower mortality and teen pregnancy rates, according to the *Northwest Territories Health Status Report* (www.hlthss.gov.nt.ca/pdf/reports/health_care_system/2011/english/nwt_health_status_report.pdf).

The report also states that there has been a recent explosion in methicillin resistant *Staphylococcus Aureus* (MRSA) infections in the territories. The incidence of MRSA infections rose from zero in 2001 to 28.3 new cases per 10 000 population in 2010. Faulting suboptimal hygiene, overcrowding and the sharing of personal items contaminated with bacteria in both health facilities and the community, the report urged NWT residents to protect themselves by adopting better personal hygiene and handwashing habits.

It also urges that communities play a broader role "in improving overall health status. By making healthy food choices, exercising regularly and limiting activities such as smoking and overuse of alcohol, we can all contribute to improving the health status of the Northwest Territories," territorial Minister of Health and Social Services J. Michael Miltenberger stated in the report.

The percentage of NWT residents who undertake enough physical activity to maintain or improve their health dropped from 54% in 2003 to 41% in 2009, well below the 53% average for Canadians residing in other parts of the country.

Similarly, the percentage of NWT residents who consume five or more servings of fruits and vegetables per day declined from 34% in 2003 to 26% in 2009, as compared with the rest of Canada, where the percentage increased from 41% to 46%.

Currently, some 63% of NWT residents are overweight or obese, the report states. That's more than 10% higher than the national prevalence of 51%.

Meanwhile, some 70% of all deaths and more than 50% of the number of days spent in hospital in the NWT are related to chronic conditions, the report states. The proportion of the population affected by diabetes rose to 4.4% in 2007–2008 from 3.1% in 2003–2004 and is likely to continue to rise, while cancer remains a leading cause of death.

The report does, however, highlight improvements in other areas. Some 70% of seniors in the territory now report good health, up from 64% in 2003. The age standardized mortality rate for all causes in the NWT has also decreased by about 36% since 1980, while the mortality gap between men and women in the territory is closing. As well, the teen birth rate dropped to a 20-year low in 2005–2007 with just 39 births per 1000 teens, compared to 86 in 1987–1989. — Lauren Vogel, *CMAJ*

Mentally ill often unnecessarily restrained

Nearly one in four Ontario mental health inpatients is subject to physical or mechanical restraints, medications or seclusion, even though they are meant to be a last resort, indicates an analysis by the Canadian Institute for Health Information (CIHI).

Roughly 24% of individuals hospitalized for mental illness experienced at least one such intervention during a hospital stay, according to the report, *Restraint Use and Other Control Interventions for Mental Health Inpatients in Ontario* (http://secure.cihi.ca/cihiweb/products/Restraint_Use_and_Other_Control_Interventions_AIB_EN.pdf).

Acute control medications was the most used intervention (59%), followed by physical and mechanical restraint (21%), and seclusion (20%).

The analysis also showed that some form of controlled intervention was 1.5 times more likely to be used in a general hospital as compared with a psychiatric hospital, while physical and mechanical restraint was 2.5 times more likely to be used in a general hospital.

"Restraint measures have historically been employed for the safety of clients and staff; however, minimizing their use continues to be our ultimate goal," Debra Churchill, director of Professional Practice with Ontario Shores Centre for Mental Health Sciences, stated in a CIHI press release about the report (www.cihi.ca/CIHI-ext-portal/internet/en/Document/types+of+care/specialized+services/mental+health+and+addictions/RELEASE_23AUG11). "There is an opportunity to look at the strategies and lessons learned by psychiatric hospitals that are successfully limiting their restraint use and to see how these lessons can be adopted more broadly."

Patients who exhibited violent behaviour or had difficulty communicating also had an increased chance of experiencing controlled interventions.

More than half of those who experienced an intervention were seen as a threat to themselves, while over a third were assessed as being a potential threat to others. Although controlled interventions were almost twice as likely to be used on those who had exhibited recent violent behaviour, 71% had not displayed violence toward others and 63% had not had a police intervention, according to the analysis.

"Although some patients who experience a control intervention exhibit vio-

lent behaviour, most do not," Dr. Nawaf Madi, program lead for Mental Health and Addictions at CIHI, stated in the press release. "An inability to communicate or to make decisions can result in confusion, both for the patient and the provider, and limit the effectiveness of more moderate approaches. Understanding such risk factors can help defuse a potentially difficult situation before it is aggravated."

Those who had difficulty making themselves understood were more than twice as likely to experience controlled interventions and those who are unable to consent to treatment were 39% more likely.

Other factors that contributed to the use of interventions were diagnosis of schizophrenia and psychotic disorders; failure to comply with prescriptions; and an inability to care for oneself. — Erin Walkinshaw, Ottawa, Ont.

Physicians appeal Rasouli ruling to Supreme Court

Arguing that lower court decisions would "require physicians to breach the applicable medical standard of care," a pair of Ontario physicians have appealed to the Supreme Court of Canada to overturn a ruling that life support cannot be withdrawn without the consent of a substitute decision-maker.

Dr. Brian Cuthbertson and Dr. Gordon Rubenfeld, physicians at the Sunnybrook Health Sciences Centre in Toronto, Ontario, sought leave to appeal from the Supreme Court in August to overturn lower court decisions that prohibit them from withdrawing mechanical ventilation from a 59-year-old mechanical engineer in a persistent vegetative state (www.cmaj.ca/lookup/doi/10.1503/cmaj.109-3855).

The patient, Hassan Rasouli, has been in a coma since he contracted bacterial meningitis following brain surgery at Sunnybrook in October 2010. Cuthbertson and Rubenfeld want to withdraw life support to prevent Rasouli from dying a slow death from complications of being bedridden. But Rasouli's family has refused their consent, arguing that his religious beliefs should be respected and that, as a devout Shia Muslim, he should be kept alive on mechanical support "until all signs of life are gone" (www.canlii.org/en/on/onsc/doc/2011/2011onsc1500/2011onsc1500.html).

Ontario's Superior Court of Justice, and subsequently, the Court of Appeal for Ontario, have ruled that the withdrawal of life support constitutes a form of "treatment" under the province's Health Care Consent Act and therefore, the consent of Rasouli's wife is required. "If her consent is not forthcoming, the appellants' proposal must be referred" to the province's Consent and Capacity Board for decision, jointly wrote Justices Michael Moldaver and Janet Simmons (www.ontariocourts.on.ca/decisions/2011/2011ONCA0482.pdf).

Cuthbertson and Rosenfeld argue in their leave application that the lower courts "misapplied the law of informed consent in order to confer upon patients a right to insist upon the continuation of a particular treatment when the medical standard of care requires it to be withdrawn," (http://thaddeuspope.com/images/Rasouli_-_Doc_appeal,_argument,_affidavits_08-2011.pdf).

The case, they argue, raises several critical questions of law, specifically:

- "Is there a special category of medical decisions taken at the end of a patient's life to which established medical standards of care do not apply?
- Is patient consent required under any circumstances to the withholding or withdrawal of treatment that the patient's doctor is not prepared to offer (or to continue to offer)?
- Is a patient's right to personal autonomy engaged by a decision to withhold or withdraw life support or other measures required to sustain life when death is otherwise imminent?
- If life support or similar measures can legally be withheld or withdrawn, what process must first be followed by doctors and what redress is available to patients or SDMs [substitute decision-makers] in the event of a conflict?"

Considerable legal ambiguity surrounds the authority to make end-of-life decisions in Canada (www.cmaj.ca/lookup/doi/10.1503/cmaj.109-3910). Court decisions across the country have been extremely inconsistent and often conflicting. — Wayne Kondro, *CMAJ*

Conflicts of interest need not be posted on websites

The United States Department of Health and Human Services has unveiled revised regulations that will require institutions that receive National Institutes of Health (NIH) funding to identify potential financial conflicts between researchers and drug-makers.

But the NIH has backed away from a proposal that would have required researchers to make full disclosure of their conflicts of interest by posting the information on a publicly accessible website. Rather, if they so choose, institutions can make the information available on a "request-only" basis, within five business days of receiving an inquiry.

The revised rules lower the threshold at which researchers must disclose financial interests, to US$5000 from US$10 000 (http://grants.nih.gov/grants/policy/coi/fcoi_final_rule.pdf). They also require researchers to disclose all "significant financial interests" to their institutions, while requiring institutions to train investigators about conflict-of-interest regulations, and report to the relevant federal agency about how conflicts of interests were identified and how they are managed.

The revised regulations also essentially leave the determination of whether something constitutes a conflict of interest to individual institutions. Each institution is to designate an official who will be responsible for determining whether an investigator's financial interests pose a conflict.

The department states in the final rule that the decision to give institutions a disclosure option is in "accordance with the overall goal of enhanced transparency. The chosen approach promotes such transparency without imposing undue burdens."

"Several respondents thought that the requirement would constitute a substantial burden and cited the necessity of setting up a database structure," the department added. "We note that the

final rule does not require the information to be provided in a specific format. Therefore, an Institution could choose to provide the information as a simple document or spreadsheet."

The revised rules fall short of the stiffer disclosure and reporting requirements that have been introduced for physicians, which require that drug companies, device makers and biologic firms report all payments and in-kind transfers to doctors totalling US$100 a year or more (www.cmaj.ca/lookup/doi/10.1503/cmaj.109-3263). Commencing in 2013, the data will be released in a publicly accessible, government-maintained database.

Still, American administrators called the revisions a step forward in transparency.

"The NIH is committed to safeguarding the public's trust in federally supported research that is conducted with the highest scientific and ethical standards," NIH Director Dr. Francis S. Collins stated in a press release (www.nih.gov/news/health/aug2011/od-23.htm). "Strengthening key provisions of the regulations with added transparency will send a clear message that NIH is committed to promoting objectivity in the research it funds."

"The medical research conducted and funded by the federal government has long been the gold standard of scientific investigation," Health and Human Services Secretary Kathleen Sebelius added in the same release. "Our financial conflict of interest rules must keep up with the times if we are to maintain our leadership role in the global scientific community." — Wayne Kondro, *CMAJ*

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