FOR THE RECORD

More support needed to meet Millennium Development Goals

With only three years remaining until the 2015 deadline for achieving the Millennium Development Goals (MDGs), the United Nations (UN) is calling upon governments, the international community, civil society and the private sector to step up their contributions to meet the outstanding goals.

Progress has slowed for several MDGs, according to the 2012 edition of *The Millennium Development Goals Report* (www.un.org/millenniumgoals/pdf/MDG%20Report%202012.pdf). Maternal mortality rates have not declined enough. It is unlikely that 75% of the world will have access to adequate sanitation facilities by 2015, the target set in one MDG. Progress has been slow in reducing child undernutrition and, over all, far too many people still live in hunger. Gender inequality also persists, as women still face barriers to education, work and participation in government in many regions.

Still, despite the challenges, the UN remains hopeful that, with help, all the MDG targets can be met. "There is now an expectation around the world that sooner, rather than later, all these goals can and must be achieved," Sha Zukang, the UN's under-secretary-general for economic and social affairs, stated in the report. "Sectors such as government, business, academia and civil society, often known for working at cross-purposes, are learning how to collaborate on shared aspirations.."

Though much work remains, several MDG targets have already been achieved, the progress report notes. Extreme poverty is decreasing in all regions, and the target of cutting the extreme poverty rate to half of its 1990 level has been met. In 2008, 24% of the population lived on less than US$1.25 a day, down from 47% in 1990. The goal of halving the percentage of people around the world without access to safe drinking water has also been achieved. In 1990, 76% of people used an improved water source, but that rose to 89% by 2010.

Significant progress has also been made in reducing the number of people living in slums (dropped from 39% in 2000 to 33% in 2012 in the developing world), achieving parity in primary education between girls and boys (ratio between enrolment rate of girls and boys in developing regions increased from 91 in 1999 to 97 in 2010), improving access to HIV treatments (an additional 1.4 million people in developing nations received antiretroviral therapy in 2010 compared to the year before), reducing cases of malaria (reported cases fell by more than 50% between 2000 and 2010 in 43 countries) and halting the spread of tuberculosis (death rate projected to be halved by 2015).

"Achieving the MDGs by 2015 is challenging but possible," Ban Ki-Moon, the UN's secretary-general, stated in the report. "The current economic crises besetting much of the developed world must not be allowed to decelerate or reverse the progress that has been made. Let us build on the successes we have made so far, and let us not relent until all the MDGs have been attained." — Roger Collier, *CMAJ*

GlaxoSmithKline pays historic US$3-billion fraud settlement

As part of a historic health care fraud settlement, drug maker GlaxoSmithKline LLC (GSK) will pay US$3 billion for criminal and civil misdeeds, including misbranding of drugs, failure to report safety data and suspect price reporting practices.

"The resolution is the largest health care fraud settlement in U.S. history and the largest payment ever by a drug company," the US Department of Justice announced in a press release (www.justice.gov/opa/pr/2012/July/12-civ-842.html).

The criminal charges relate to the promotion of three drugs for uses other than those approved by the US Food and Drug Administration. The US government alleges that:

- GlaxoSmithKline promoted paroxetine (Paxil) for treating depression in people under age 18 despite not being approved for pediatric use; sponsored dinner, lunch and spa programs to promote the use of paroxetine in young people; and withheld data indicating the drug was ineffective in youth while distributing a misleading medical journal article suggesting the opposite.
- GlaxoSmithKline promoted the depression drug bupropion (Wellbutrin) for off-label uses, including weight loss and treating sexual dysfunction; paid millions of dollars to doctors to promote off-label uses at meetings; and used sales representatives, sham advisory boards and continuing medical education programs to promote unapproved uses.
- GlaxoSmithKline withheld safety data about the diabetes drug rosiglitazone maleate (Avandia) from postmarketing studies and other evidence suggesting cardiovascular risks.

The civil liability charges relate to offering kickbacks to doctors for prescribing drugs (some for off-label uses), making false and misleading claims about drug safety, reporting false pricing information and underpaying rebates under the Medicaid Drug Rebate Program. The US government has posted court documents related to the case online (www.justice.gov/opa/gsk-docs.html).

"Today's multi-billion dollar settlement is unprecedented in both size and scope. It underscores this Administra-

tion's firm commitment to protecting the American people and holding accountable those who commit health care fraud," Deputy Attorney General James Cole said in a speech (www.justice.gov/iso/opa/dag/speeches/2012/dag-speech-1207021.html). "At every level, we are determined to stop practices that jeopardize patients' health; harm taxpayers; and violate the public trust — and this historic action is a clear warning to any company that chooses to break the law."

GlaxoSmithKline, meanwhile, acknowledged wrong-doing and promised to avoid such practices in the future. "Today brings to resolution difficult, long-standing matters for GSK. Whilst these originate in a different era for the company, they cannot and will not be ignored," CEO Andrew Witty said in a statement (www.gsk.com/media/pressreleases/2012/2012-press release-1164663.htm). "On behalf of GSK, I want to express our regret and reiterate that we have learnt from the mistakes that were made." — Roger Collier, *CMAJ*

Crown to appeal assisted suicide ruling

The issue of physician-assisted suicide will return to the legal battleground as the federal government has announced it will appeal a British Columbia Supreme Court ruling that denying terminally ill Canadians the right to choose how they end their lives is discriminatory and a breach of their constitutional rights.

The Criminal Code provision that prohibits physicians from counseling or providing assistance in a suicide is "constitutionally valid," Federal Justice Minister Rob Nicholson stated in a press release announcing the government's plans (www.justice.gc.ca/eng/news-nouv/nr-cp/2012/doc_32769.html).

"The Government also objects to the lower court's decision to grant a 'constitutional exemption' resembling a regulatory framework for assisted suicide," Nicholson added. "The laws surrounding euthanasia and assisted suicide exist to protect all Canadians, including those who are most vulnerable, such as people who are sick or elderly or people with disabilities. The Supreme Court of Canada acknowledged the state interest in protecting human life and upheld the constitutionality of the existing legislation in Rodriguez (1993). In April 2010, a large majority of Parliamentarians voted not to change these laws, which is an expression of democratic will on this topic. It is an emotional and divisive issue for many Canadians. The Government of Canada will provide its full position before the British Columbia Court of Appeal when the matter is heard. As the matter continues to be before the court, the Government will not comment further."

British Columbia Supreme Court Madam Justice Lynn Smith had ruled in Carter v. Canada (Attorney General) that the Criminal Code prohibition was a violation of the equality provision of the Canadian Charters and Freedoms because it discriminated against the incurably ill. "It perpetuates and worsens a disadvantage experienced by persons with disabilities. The dignity of choice should be afforded to Canadians equally, but the law as it stands does not do so with respect to this ultimately personal and fundamental choice" (http://www.canlii.org/en/bc/bcsc/doc/2012/2012bcsc886/2012bcsc886.html).

The rationale for an absolute prohibition, that it protects vulnerable people being induced to commit suicide in moments of potential weakness, isn't supported by the evidence, which shows that "a system with properly designed and administered safeguards could, with a very high degree of certainty, prevent vulnerable persons from being induced to commit suicide while permitting exceptions for competent, fully-informed persons acting voluntarily to receive physician-assisted death," Smith wrote.

"The effect of the absolute prohibition on the life, liberty and security of the person interests of the plaintiffs is very severe, and is grossly disproportionate to its effect on preventing inducement of vulnerable people to commit suicide, promoting palliative care, protecting physician-patient relationships, protecting vulnerable people, and upholding the state interest in the preservation of human life," Smith wrote.

Smith gave the government a year in which to draft legislation allowing physician-assisted suicide within certain specified parameters, i.e., "a fully-informed, non-ambivalent competent adult patient who: (a) is free from coercion and undue influence, is not clinically depressed and who personally (not through a substituted decision-maker) requests physician-assisted death; and (b) is materially physically disabled or is soon to become so, has been diagnosed by a medical practitioner as having a serious illness, disease or disability (including disability arising from traumatic injury), is in a state of advanced weakening capacities with no chance of improvement, has an illness that is without remedy as determined by reference to treatment options acceptable to the person, and has an illness causing enduring physical or psychological suffering that is intolerable to that person and cannot be alleviated by any medical treatment acceptable to that person."

In the course of her comprehensive 395-page ruling, Smith also stated that a prohibition on physician-assisted suicide can have a deleterious effect on the role of physicians. It "probably means that patients are less able to be open about their thoughts and wishes, and that physicians are put in the position of either avoiding such discussion or, having entered into it, refusing to assist. In the view of some physicians, the law prevents them from doing what is in their patients' best interests and requires them to abandon their patients. For physicians who see no ethical distinction between assisted death for grievously ill patients and certain current legal end-of-life practices, the law draws an arbitrary line and promotes a kind of hypocrisy. Removing it would permit physicians a more open relationship with their patients and support intellectual honesty in the ethical debate. Indeed, evidence from other jurisdictions suggests that physicians are able to provide better overall end-of-life treatment to patients at the end of their lives once the topic of assisted death is openly put on the table."

Smith's ruling was consistent with

the recommendations of a Royal Society of Canada expert panel recommendation that Canada should legalize assisted suicide and voluntary euthanasia for competent adults on the grounds that there is no philosophic distinction between the pair and withholding or withdrawing life-sustaining treatment from competent adults. The report also argues for the creation of a regulatory regime, including a national oversight commission to monitor cases of assisted suicide and voluntary euthanasia as part of a bid to prevent "mistaken or intentional violations of the new law" (www.cmaj.ca/lookup/doi/10.1503/cmaj.109-4059). — Wayne Kondro, *CMAJ*

Wind storm

Arguing that an understanding of the health effects of proximity to wind turbine noise is at best limited, the federal government has launched a two-year study to ascertain whether there is any validity to health-related complaints from rural Canadians living near wind farms.

"This study is in response to questions from residents living near wind farms about possible health effects of low frequency noise generated by wind turbines," Federal Health Minister Leona Aglukkaq stated in a press release (www.hc-sc.gc.ca/ahc-asc/media/nr-cp/_2012/2012-109-eng.php). Complaints have included sleep disturbance, elevated blood pressure levels, heart palpitations, hearing loss, vertigo and nausea.

The proposed field study will evaluate such "self-reported health impacts and symptoms of illness against objective biomarkers of stress and the sound levels generated by wind turbines, including low frequency noise," according to the research protocol (www.hc-sc.gc.ca/ewh-semt/consult/_2012/wind_turbine-eoliennes/research_recherche-eng.php). "This data will be correlated with calculated wind turbine noise so that any potential relationship to reported health symptoms can be reliably determined."

"The research design includes a computer-assisted personal interview using a questionnaire consisting of modules that probe endpoints such as noise annoyance, quality of life, sleep quality, stress, chronic illnesses and perceived impacts on health. Following the 25-minute interview, the subject will be invited to participate in the health measures collection part of the study. This will include an automated blood pressure measurement and the collection of a small hair sample that will provide a 90-day retroactive average cortisol level. An objective evaluation of sleep will be undertaken using actigraphy for a period of 7 consecutive days, which will be synchronised with wind turbine operational data. Environmental sound level measurements, including low frequency noise, will be conducted inside and outside a subsample of homes in order to validate parameters ensuring accurate sound level modeling. The sample will consist of 2000 dwellings at setback distances ranging from less than 500 metres to greater than 5 kilometres from 8-12 wind turbine power plants."

Health Canada estimated that wind turbines now generate 5.4 gigawatts of electricity annually, or 2.3% of demand. It notes that the wind energy industry believes it can generate 20% of Canada's electricity needs by 2025. But, the research protocol adds, "development has been challenged by public resistance to wind farms based on various concerns, including the potential health impacts of wind turbine noise. The health effects reported by individuals living in communities in close proximity to wind turbine installations are poorly understood due to limited scientific research in this area. This is coupled with the many challenges faced in measuring and modeling wind turbine noise, in particular low frequency noise, which continue to be knowledge gaps in this area. The continued success and viability of wind turbine energy in Canada, and around the world, will rely upon a thorough understanding of the potential health impacts and community concerns that underscore public resistance."

The federal government has allocated $1.8 million over three years to the study, which is expected to be completed in 2014 and will be carried out by a 26-member working group headed by David Michaud, a research scientist with the Health Effects and Assessment Division of Health Canada. — Wayne Kondro, *CMAJ*

Mental health and lost labour participation

Depression, dysthymia, bipolar disorder, social phobia, panic disorder and agoraphobia cost the Canadian economy $20.7 billion in "lost labour market participation" in 2012, in addition to the toll they took through "the costs of patient care, insurance for employers, services in communities, and the many intangible costs for the individuals affected and their families," according to the Conference Board of Canada.

The toll taken by the six mental ailments, which are "the six most common conditions afflicting the working-age population," will rise to $29.1 billion by 2030, the Conference Board forecasts in a report, *Mental Health Issues in the Labour Force: Reducing the Economic Impact on Canada* (available for a fee at: www.conferenceboard.ca/e-library/abstract.aspx?did=4957).

The Conference Board derived its conclusion that the six mental ailments resulted in a 1.3% lower growth rate in the gross domestic product in 2012 using a methodology that assessed a "base case" model of the Canadian economy (in which those suffering mental ailments were fully functional) against a model based on Statistics Canada survey data on the number of Canadians affected by mental illness, as well as information obtained from Canadian insurers that provide short- and long-term disability programs, "weighted" by degree of debilitation (using the categories "unable to work," "able to work part time," "able to work but with reducing functioning" and "fully functioning at work").

"Almost 452,000 additional workers would be participating in the labour force in 2012 — rising to over 507,000 by 2030 — if they were not affected by mental illness," the Conference Board concluded, adding that the burden is felt by a "variety of stakeholders. Employers bear the costs of lost labour and reduced worker output. Governments feel the effects of lost tax rev-

enue and demand for spending. And communities experience a wide variety of consequences, including social problems like homelessness."

To ameliorate the economic impact, the Conference Board recommends that employers and governments "create workplace conditions that support the participation of people living with poor mental health" and "address the stigma associated with mental illness in the workplace."

Employers can help achieve the former by "training all employees, including managers and staff, in how to create working conditions that facilitate the inclusion of workers with mental health challenges and optimize their performance; promoting improvements in workplace conditions, programs, and policies that will facilitate increased and more effective engagement in work by those working part time or with reduced functioning; where feasible, creating new employment opportunities for those who may be unnecessarily removed from the workforce. The actions taken could involve: designing jobs tailored to the individual's abilities, adjusting working hours or location, and creating flexible arrangements that adjust to individual needs." Governments, meanwhile, can do so by "providing financial incentives to organizations that are already championing and creating work environments that are sensitive to the issues and are supportive of those with poor mental health; creating incentives for employers — large and small — to make their workplaces attractive to workers living with mental illnesses; supporting the creation and operation of social enterprises that explicitly engage with workforce employees living with mental illnesses; and disseminating information about promising practices in creating supportive workplaces."

As for reducing stigma, the Conference Board recommends that employers can achieve this through such actions as "creating an accepting environment, where employees feel comfortable approaching their managers, colleagues, or HR [human resources] professionals to discuss their needs; offering resources to employees, such as information on how to cope with stressors; and sharing information on where employees can find additional resources," while governments can undertake such actions as "leading by example through programs offered to government employees; and providing financial incentives and supports to organizations actively engaged in fighting stigma in the workplace." — Wayne Kondro, *CMAJ*

The provincial prescription

A move toward pan-Canadian bulk purchasing of generic drugs, nation-wide adoption of heart disease and foot ulcer guidelines, interprovincial sharing of health human resource information and an expansion of team-based care are "innovations" identified by the nation's premiers as vital to improving and sustaining Canada's health care system.

The recommended innovations will "enhance patient care and improve value for taxpayers," the premiers argued Thursday in a communiqué from a meeting of the Council of the Federation in Halifax, Nova Scotia (www.councilofthefederation.ca/pdfs/Jul26_Health%20Communique-FINAL.pdf). They were developed by a Health Care Innovation Working Group, co-chaired by Prince Edward Island Premier Robert Ghiz and Saskatchewan Premier Brad Wall, that was struck to examine scope of practice, health human resources and clinical practice issues across Canada (www.cmaj.ca/lookup/doi/10.1503/cmaj.109-4109).

As a prelude to the move toward bulk provincial purchasing of generic drugs, the working group urged that each province and territory "identify three to five generic drugs to include in a provincial/territorial Competitive Value Price Initiative that would result in better prices for generic drugs," the working group urged in its report *From Innovation to Action* (www.councilofthefederation.ca/pdfs/Health%20Innovation%20Report-E-WEB.pdf).

Adopting a pan-Canadian purchasing approach similar to one now in place for some brand-name drugs is the "next step" in the province's pharmaceutical strategy, the report added. But there "will need to be an adequate understanding and consideration of both the diversity of the supply chain, and the issue of safety and quality in the supply chain. … Careful consideration will need to be given to identifying potential products, establishing criteria, and finally implementing a national competitive bidding process in order to mitigate potential risks. However, the benefits of reducing prices for generic drugs through a provincial-territorial approach are great; allowing us to move towards equitable and consistent pricing for all Canadians."

The report also indicated that a national competitive bidding process will be launched by the fall that will "result in lower prices taking effect by April 1, 2013."

With respect to clinical practice guidelines, the working group urged nation-wide adoption of the C-CHANGE guidelines for cardiovascular disease (www.cmaj.ca/lookup/doi/10.1503/cmaj.101508) to help reduce annual $20.9 billion costs (including $2.9 billion for hospitalizations) of treating cardiovascular disease, as well as the Registered Nurses Association of Ontario Guidelines for the Assessment and Management of Foot Ulcers for People with Diabetes, to reduce the $150 million per-year cost of treating diabetic foot ulcers.

Arguing that there is "underutilization of collaborative, inter-professional care," the working group identified examples of successful team-based models that provinces might want to adopt to provide primary care, emergency health services in rural areas and home care across the country. Identified as leading lights in the area of access to primary care were the Chinook Primary Care Network: Taber Clinic in Alberta, the Family Health Team Clinic at St. Michael's Hospital in Toronto, Ontario, the Groupes de médicine de famille within Quebec and the Long and Brier Islands Community Para-Medicine group in Nova Scotia. The 24/7 Collaborative Emergency Centres in Nova Scotia were held up as ideals in the provision of emergency services in rural communities, while Manitoba's Virtual Wards, British Columbia's Virtual Ward(s) Acute Home-Based Treatment and New Brunswick's Extramural Program were lauded as the

best examples of providing access to enhanced home care.

In the interests of a more pan-Canadian approach to health human resources, the working group recommended that provinces and territories "work together, on a voluntary basis, on creating a health human resource website to facilitate better communication of information about health human resources labour markets," particularly workforce projections, health human resource datasets and training programs. — Wayne Kondro, *CMAJ*

Making men out of boys

Grueling conditioning regimens to toughen or punish athletes are a blueprint for disaster according to a multi-association task force.

"Physical activity should not be used as retribution, for coercion, or as discipline for unsatisfactory athletic or academic performance or unacceptable behavior. No additional physical burden that would increase the risk of injury or sudden death should be placed on the athlete under any circumstance," states *The Inter-Association Task Force for Preventing Sudden Death in Collegiate Conditioning Sessions: Best Practices Recommendations* (www.nata.org/sites/default/files/preventingsuddendeath-consensusstatement.pdf).

"Maximizing strength and conditioning sessions has become fundamental to sport," the guidelines state. "The right combination of strength, speed, cardiorespiratory fitness, and other components of athletic capacity can complement skill and enhance performance for all athletes. A sound and effective training program that relies on scientific principles of exercise physiology and biomechanics intended to produce outcomes that are sensitive and specific to the sport should be the goals. Unfortunately, the athlete's development, health, and safety are sometimes overshadowed by a culture that values making athletes tough, instilling discipline, and focusing on success at all costs. This ill-conceived philosophy has been a contributor to the alarming increase in collegiate athlete deaths and serious injuries during conditioning sessions."

Developed in response to the deaths of 21 collegiate football players during conditioning sessions since the year 2000, the best practice guidelines contend that conditioning sessions such as running sprints, lifting weights and endurance exercises are one of the dark corners of college athletics as they aren't as supervised as games or formal practices. "The 3 most common causes of the fatalities were (in order) exercise-related sudden death associated with sickle cell trait (SCT), exertional heat stroke, and cardiac conditions," states the guideline. "Also, the incidence of exertional rhabdomyolysis in collegiate athletes appears to be increasing. Excesses in strength training and conditioning—workouts that are too novel, too much, too soon, or too intense (or a combination of these)—have a strong connection to exertional rhabdomyolysis."

One of the greatest risks is introducing full-intensity workouts too quickly after an athlete returns to the game following an injury or spring or summer break, argue the guidelines, which were developed by a task force led by the United States National Athletic Trainer's Association and a number of other bodies including the American College of Emergency Physicians and the Canadian Athletic Therapists' Association. "Conditioning periods should be phased in gradually and progressively to encourage proper exercise acclimatization and to minimize the risk of adverse effects on health. … The S&CC [strength and conditioning coach] should work cooperatively with medical staff (certified athletic trainer, team physician, or both) when developing transitional workout plans, particularly if the athlete is recovering from an injury or if any uncertainty exists regarding the pace of exercise progression. Transitional periods should invoke an appropriate work-to-rest ratio for the sport. A 1:4 work-to-rest ratio (with greater rest permissible) when conducting serial activity of an intense nature, for example, is a good starting place to emphasize recovery."

Other recommendations include training for strength and conditioning coaches in first aid, cardiopulmonary resuscitation and the use of automated external defibrillators; that an athletic trainer or team physician be present during high-risk sessions such as sprints, mat drills and stations; and that institutions train all staff, including coaches, in basic treatment strategies for heat stroke, sudden cardiac arrest or exertional collapse. — Wayne Kondro, *CMAJ*

Addressing substance abuse and mental health problems in baby boomers

Nearly one in five older United States residents has a mental health or substance abuse problem and the country's health care workforce is ill-equipped to provide adequate care for this population, according to the Institute of Medicine.

This problem will only become worse as the population of adults age 65 and above swells from around 40 million to an estimated 72.1 million by 2030, the institute suggests in a report, *The mental health and substance use workforce for older adults: In whose hands?* (www.iom.edu/Reports/2012/The-Mental-Health-and-Substance-Use-Workforce-for-Older-Adults.aspx).

"During the same period, the ethnic, racial, and cultural makeup of the older adult population will become more diverse than ever, and the health care demands and costs resulting from these demographic shifts are expected to be unprecedented," states a brief of the report (www.iom.edu/~/media/Files/Report%20Files/2012/The-Mental-Health-and-Substance-Use-Workforce-for-Older-Adults/MHSU_olderadults_RB_FINAL.pdf).

The mental health issues of older adults are myriad and complex. Dementia is common, as is depression, a condition often made worse when combined with the grief of losing a spouse. Mental conditions can also be hard to detect due to sensory and cognitive impairments. Substance abuse is more common in this population than many might think, the report suggests, and age alters the way the body metabolizes alcohol and other drugs.

Yet, despite the dire need, the number of health care workers in or entering the field of geriatric medicine is "dis-

concertingly small." To help remedy this unfortunate situation, the Institute of Medicine has made five recommendations: designate an entity for coordinating the development and strengthening of the geriatric mental health workforce; ensure more federal agencies assume responsibility for building the capacity of the mental health workforce for older citizens; modify accreditation and certification standards to require competence in geriatric mental health for all people who deliver care to older adults; provide funding for training, scholarships and loan forgiveness for people who work with older adults with mental health or substance abuse problems; and implement a data collection and reporting strategy for workforce planning in this area.

"The breadth and magnitude of the problem have grown to such proportions that no single approach, nor a few isolated changes in disparate federal agencies, can adequately address the issue," states the report brief. "Overcoming these challenges will require focused and coordinated action by each of the entities that the committee identifies in its recommendations." — Roger Collier, *CMAJ*

The effects of military service on health

Compared to nonveterans, men who served in the military are more likely to have two or more chronic conditions, experience work limitations and suffer from serious psychological distress, according to the National Center for Health Statistics, a division of the United States' Centers for Disease Control and Prevention.

"The effects of military service on physical and psychological health, especially after extended overseas deployments, are complex," states the center's August 2012 data brief (www.cdc.gov/nchs/data/databriefs/db101.pdf). "There may also be long-term consequences of military service for the health and health care utilization of veterans as they age."

The prevalence of multiple chronic conditions is significantly higher for veterans aged 45–64 than for nonveterans of the same age. For ages 45–54, 19% of veterans reported two or more chronic conditions, compared to 13% for nonveterans. The difference remains consistent with age, the rates increasing to 31% and 25%, respectively, for ages 55–64.

Though overall rates of serious psychological distress were fairly low for men aged 25–64, veterans were still more likely to report problems, at a rate of 5% for ages 45–54 compared to 3% for nonveterans. For other ages, however, there was little difference.

Older veterans are also more likely to have work limitations due to their health. For men aged 45–64, 19% of veterans reported work limitations, compared to 11% of nonveterans.

The good news for veterans is that, in all age groups, they are more likely to have health insurance.

"The health differences that appear at older ages suggest that the effects of military service on health may appear later in life," states the document. "Veterans also differ from nonveterans in some sociodemographic characteristics, and these characteristics may be related to observed differences in their health and functioning. Veterans are more likely to have health insurance, which may influence their access to health care and the likelihood of being diagnosed with various conditions." — Roger Collier, *CMAJ*

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