

FOR THE RECORD

Dialing doctors for self-management advice

Support groups, apps, home visits, coaching sessions and other measures aimed at promoting more self-management of chronic diseases should become a routine element of primary care, according to the Health Council of Canada.

“Targeted investments to advance self-management hold potential to yield big wins on many levels — for individuals and their families (e.g., better quality of life); for health care providers (e.g., better outcomes for their patients); for the efficient, effective, and sustainable use of health care resources; and for a healthier, more productive Canada,” the Council states in a report, *Self-management support for Canadians with chronic health conditions: A focus for primary health care* (http://healthcouncilcanada.ca/tree/HCC_SelfManagementReport_FA.pdf).

The report argues that some of the burden for promoting better self-management — which is defined as “the tasks that an individual must undertake to live well with one or more chronic conditions. These tasks include having the confidence to deal with medical management, role management, and emotional management of their conditions” — should fall on physicians and other health care providers.

But “many providers need education and training in effective techniques for self-management support. Appropriate funding models and support for practice redesign — to introduce interprofessional team-based care, for example — are also important to allow providers to spend the time needed with patients and to expand the range of services they provide to support patients with more complex conditions.”

Among models that physicians might consider utilizing is the “Assess, Advise, Agree, Assist, Arrange” — or

“5A” strategy — commonly used to promote smoking cessation or Australia’s “Flinders Program for Chronic Care Management” that features “a number of tools for assessment, interviewing, and goal setting designed to help providers collaboratively identify issues, formulate a care plan, and monitor and review progress.”

In recommending the creation of “an integrated, system-wide approach to self-management support,” the report argues that current Canadian efforts to promote self-management of such chronic conditions as arthritis, cancer, diabetes, depression, heart disease, asthma and chronic obstructive pulmonary disease are highly fragmented.

The report also urges that governments follow the lead of Alberta and British Columbia in implementing comprehensive, systemic approaches to self-management such as BC’s “Stepped Care for Self-Management Support” program, which has “four levels that build progressively, from fundamental components of care and support that all patients with chronic conditions need to more advanced approaches for patients with more complex challenges. The foundation level focuses on honouring patients’ culture, promoting health literacy, and fostering active self-management. The second level focuses on the use of core techniques that support behavioural change to help patients become successful self-managers. The third level captures advanced approaches that primary health care practices can use (e.g., motivational interviewing, case management, problem-solving therapy, shared medical appointments). The fourth level involves advanced training in self-management support for primary health care providers and access to specialty expertise (e.g., mental health specialists) to meet the needs of patients with more complex conditions.”

Other recommendations include one

that governments “enable primary health care providers to deliver self-management support as a routine part of care, according to a patients’ needs” by, for example, improving linkages between health providers and community-based self-management support programs through the development of online portals. — Wayne Kondro, *CMAJ*

Grim and grimmer global health statistics

There are now one-half billion people in the world who are obese. One in 10 of the world’s adults have diabetes. Hypertension is up. Noncommunicable diseases cause almost two thirds of deaths worldwide. Malaria still threatens half the world’s population.

But childhood mortality rates are not quite as grim as they once were, at least in some countries. Measles death rates are down, as are maternal mortality rates, though not in as many countries and not nearly as rapidly as had been hoped by World Health (WHO) officials. There are still about nine million new cases of tuberculosis annually and “multidrug-resistant tuberculosis continues to present significant problems.” About 2.7 million people per year are newly infected with HIV, with 70% of those cases occurring in sub-Saharan Africa. Some 34 million people are living with HIV. About one billion people in 149 countries are affected by 17 so-called neglected tropical diseases such as dengue and leishmaniasis.

Such are among the highlights of the WHO’s annual statistical report on the state of global health affairs for 2012. For the first time, it reports data on the percentage of the world’s population that has elevated blood pressure or blood glucose levels. In Africa, as many as half of adults are believed to have high blood pressure and most of those are undiagnosed, states the

report, *World Health Statistics 2012* (www.who.int/entity/gho/publications/world_health_statistics/EN_WHS2012_Full.pdf). The global average prevalence for raised blood glucose levels is roughly 10%, and as high as 33% in the populations of some Pacific Island countries.

“This report is further evidence of the dramatic increase in the conditions that trigger heart disease and other chronic illnesses, particularly in low- and middle-income countries,” Dr. Margaret Chan, WHO’s director-general, stated in a press release (www.who.int/mediacentre/news/releases/2012/world_health_statistics_20120516/en/index.html).

“In every region of the world, obesity doubled between 1980 and 2008,” added Dr. Ties Boerma, director of WHO’s Department of Health Statistics and Information Systems. “Today, half a billion people (12% of the world’s population) are considered obese.”

WHO also decried the general lack of death registration, noting that just 34 countries, representing about 15% of the world’s population, produce “high-quality cause-of-death data. In low and middle-income countries, less than 10% of deaths are registered.”

There continue to be major disparities in health spending levels, the report also notes. “Expenditures per capita from all sources — public, private and external partners — ranged from US\$11 in Eritrea to US\$8262 in Luxembourg. Average (weighted) per capita expenditures also varied substantially across WHO regions and country-income groupings — ranging from US\$48 in the WHO South-East Asia Region to US\$3187 in the WHO Region of the Americas; and from US\$25 in low-income countries to US\$4692 in high-income countries.”

In 2009, some 29 countries did not meet the minimum US\$44 bar for health spending set by WHO’s High Level Taskforce on Innovative International Financing for Health Systems, despite the fact that large injections of cash were made into their nations as a result of the United Nations Millennium Declaration of 2000. India, the second most populous country in the world with 1.22 billion people, was exactly at that US\$44 bar. “At this level

of funding, it is simply not possible to ensure universal access to even a limited set of essential health services.”

Obtaining health services also continues to drive people into poverty, the report adds. “Information on the extent of financial catastrophe and impoverishment associated with direct out-of-pocket payments for health is available for 89 countries. It is estimated that each year up to 10% of the population in these countries suffers this type of financial catastrophe, with up to 4% pushed under the poverty line. Based on data covering 90% of the world’s population, an estimated 100 million people are pushed under the poverty line each year simply because they use health services for which they are forced to pay out of their own pockets.” — Wayne Kondro, *CMAJ*

Fewer Canadians dying an untimely death in recent decades

The rate of untimely deaths dropped from 373 per 100 000 Canadians in 1979 to 185 per 100 000 in 2008, the Canadian Institute of Health Information (CIHI) and Statistics Canada said while unveiling three new indicators of Canadian health system performance built around the concept of “avoidable mortality.”

Avoidable mortality, states the report, *Health Indicators 2012*, “refers to untimely deaths that should not occur in the presence of timely and effective health care, including prevention (https://secure.cihi.ca/free_products/health_indicators_2012_en.pdf). The three variants therein are “Potentially avoidable mortality — premature deaths that could potentially have been avoided through all levels of prevention (primary, secondary, tertiary); Mortality from preventable causes — a subset of avoidable mortality that informs efforts to reduce the number of initial cases (that is, incidence reduction); through these efforts, deaths can be prevented by avoiding new cases altogether; and Mortality from treatable causes — a subset of avoidable mortality that informs efforts to reduce the number of

people who die once they have a condition, or case fatality reduction.”

More than 92 700 Canadians died prematurely (i.e., before the age of 75) in 2008, a rate of 255 per 100 000, as compared with 460 per 100 000 in 1979. Premature mortalities comprised “almost 40% of all deaths in Canada. This translated to 4,471 potential years of life lost (PYLL) per 100,000 Canadians or more than 1.5 million PYLL in Canada in one year.” The largest declines occurred in the Yukon, Quebec and Ontario.

Some 72%, or 67 127 (a rate of 185 per 100 000) of those premature deaths fell within the subset of “potentially avoidable deaths,” the report added. “The magnitude and rate of decline by cause of death varied substantially. Circulatory diseases represented the largest cause-specific decrease (72% from 1979 to 2008). Digestive diseases and injuries also saw substantial reductions (61% and 49%, respectively). Overall, rates of avoidable mortality were higher for males than females. Over the past 30 years, rates among males have been reduced by more than half (55%) compared with a 43% reduction among females. The narrowing gap in avoidable mortality rates between males and females was primarily due to reductions in mortality from circulatory disease among males.”

The rate of “mortality from preventable causes” — which the report defines as “deaths from conditions considerably linked to modifiable factors, such as smoking (e.g. lung cancer) or excessive alcohol consumption (e.g. liver cirrhosis), as well as deaths related to effective public health interventions, such as vaccinations, or traffic safety legislation (regarding speed limits, seat belts and motorcycle helmets, for example)” — dropped to 119 per 100 000 Canadians in 2008 from 225 per 100 000 in 1979, again with substantial variations by province. “Among the three leading causes of preventable mortality, rates of death due to neoplasms were higher in the Atlantic provinces and Quebec, while mortality rates due to injuries were higher in many of the western provinces (Saskatchewan, Manitoba and Alberta). Among other causes of preventable death, British Columbia

and Manitoba had higher rates of death due to infections.”

The rate of “mortality from treatable causes” — or deaths “that potentially could be averted by screening, early detection and successful treatment with timely and effective health care interventions” — declined to 66 per 100 000 from 149 per 100 000 over the three-decade period. Within the subset, “rates of death due to circulatory diseases were highest in Saskatchewan and Manitoba, and mortality rates due to neoplasms and infant and maternal causes were highest in Manitoba and Newfoundland and Labrador.”

Collectively, the avoidable mortality indicators “can serve to inform where Canada’s health system has made gains and to point to where more work is needed. It can also help to quantify potential gains,” the report added. “For example, in an ideal world where all avoidable mortality in Canada would have been eliminated, life expectancy at birth for the years 2006 to 2008 would have been 85.8 years — 4.9 years longer than the actual life expectancy of 80.9 years. Three of the 4.9 years would be attributed to eliminating preventable mortality, and the other 1.9 years would come from eliminating mortality from treatable causes.”

CIHI also compared Canada’s avoidable mortality rates with those of six countries (using the World Health Organization’s mortality database). The results showed that Canada had the fourth worst avoidable mortality rate in 2004. Japan and France had the lowest rates, while the United States, the United Kingdom and Germany had the highest. — Wayne Kondro, *CMAJ*

Patients left in pain

Patients in the United Kingdom often do not receive the treatment they need for pain associated with cancer, neurodegenerative conditions, chronic illnesses such as kidney, liver and respiratory disease or other progressive conditions, according to the UK’s National Institute for Health and Clinical Excellence (NICE).

“Misinterpretations and misunderstanding have surrounded the use of strong opioids for decades, and these

are only slowly being resolved. Until recently, prescribing advice has been varied and sometimes conflicting. These factors, along with the wide range of formulations and preparations, have resulted in errors causing underdosing and avoidable pain, or overdosing and distressing adverse effects. Despite repeated warnings from regulatory agencies, these problems have led on occasion to patient deaths, and resulted in doctors facing the General Medical Council or court proceedings, NICE states in a new guidance, *Opioids in palliative care: safe and effective prescribing of strong opioids for pain in palliative care of adults* (www.nice.org.uk/nicemedia/live/13745/59285/59285.pdf).

Although several strong opioids are licensed for use, relatively few (primarily buprenorphine, diamorphine, fentanyl, morphine and oxycodone) are used and those that are should be used cautiously, the guidance states. “The pharmacokinetics of the various opioids are very different and there are marked differences in bioavailability, metabolism and response among patients. A suitable opioid must be selected for each patient and, because drug doses cannot be estimated or calculated in advance, the dose must be individually titrated. Effective and safe titration of opioids has a major impact on patient comfort.”

The guidelines sketch proper procedure in offering opioids to patients, including discussion of “side effects and signs of toxicity.”

“When starting treatment with strong opioids, offer patients with advanced and progressive disease regular oral sustained-release or oral immediate-release morphine (depending on patient preference), with rescue doses of oral immediate-release morphine for breakthrough pain.” NICE states. “For patients with no renal or hepatic comorbidities, offer a typical total daily starting dose schedule of 20–30 mg of oral morphine (for example, 10–15 mg oral sustained-release morphine twice daily), plus 5 mg oral immediate-release morphine for rescue doses during the titration phase. Adjust the dose until a good balance exists between acceptable pain control and side effects. If this balance is not reached after a few dose adjustments, seek specialist advice. Offer

patients frequent review, particularly in the titration phase. Seek specialist advice before prescribing strong opioids for patients with moderate to severe renal or hepatic impairment.”

The guidelines also sketch the conditions under which to offer oral, transdermal patch or subcutaneous formulations of opioids, as well as advice to offer patients about the management of constipation, nausea and drowsiness. —Wayne Kondro, *CMAJ*

Casuistical spin on American health care costs

It’s misleading to say that Americans are increasingly being asked to absorb a larger share of health care costs out-of-pocket, according to the United States National Institute for Health Care Management.

While consumers are being asked to pay higher insurance premiums and deal with higher copayments and deductibles, their share of the overall health care pie has dramatically declined over the past five decades, the institute argues in an analysis, *U.S. Health Care Spending: The Big Picture* (http://nihcm.org/images/stories/Data_Brief_1_-_Big_Picture_FINAL.pdf).

Government spending on programs like Medicare (for the elderly) and Medicaid (for the poor), as well as other public and private insurance outlays, have absorbed the brunt of spiralling health-related costs in the US, which reached US\$2.594 trillion (US\$8400 per capita) in 2010, or almost 18% of gross domestic product, and which are projected to reach \$US4.6 trillion, or 19.8% of GDP in 2020, the institute stated.

“While consumers are increasingly being called upon to pay larger amounts for their health care at the point of service through copayments and deductibles, the reliance on out-of-pocket payments has actually declined dramatically over time as public and private insurance have taken on greater roles,” the analysis stated. “Per-person out-of-pocket spending was nearly \$1000 in 2010, considerably higher than the \$70 expense incurred in 1960 and some 88 percent higher than the

1960 level even after adjusting for inflation. When we consider out-of-pocket payments as a percent of total spending for personal health care services, however, a very different picture emerges of the burden placed on consumers. In 1960, more than half of all personal health care spending was paid for directly by consumers out of pocket. The advent of Medicare and Medicaid in the mid-1960s sharply reduced this burden, and it has continued to shrink over time as these public programs and private insurance have grown in importance. By 2010, less than 14 percent of all personal health care spending was from out-of-pocket payments. This precipitous decline in the relative importance of out-of-pocket payment for personal health care services is a major reason why the household share of national spending has fallen over time despite rising household outlays for health insurance premiums. Between 1987 and 2010, household spending for private premiums rose from 8.4 to 10 percent as a share of total national health spending, but out-of-pocket spending as a share of overall spending fell from 21.2 to 11.6 percent.”

US outlays, as a percentage of GDP, are well above the 11% or 12% rates of Canada and many European nations, but health care spending growth rates are declining through time, the study added. “Much of this slowdown can be attributed to the recent recession as job losses reduced employer-sponsored health insurance and broader economic precariousness left people less able and/or less willing to spend money on health care, even if they still had insurance. But it is important to realize that the spending slowdown is part of a longer trend that preceded the recession and to acknowledge that other policy changes and systematic influences might also be playing a role. Such factors include an ongoing shift to value-based purchasing, the expiration of patents for numerous blockbuster drugs coupled with continued movement toward use of generics, and reductions in provider payment rates by Medicare and Medicaid. Whether there has been a fundamental shift in how we consume medical care and whether this change

and other factors will be sustainable over the longer term are open questions.”

The analysis indicates that hospital care accounts for 39%, or about US\$451 per capita, of overall spending health care increases between 2006–2010. Physician and clinical services were responsible for about 17% of the increase, or US\$199 per capita, followed by home health and other long-term care facilities, 17% or US\$197 per capita. — Wayne Kondro, *CMAJ*

Acts of isolation

Fragmented. Incomplete. Inequitable. The standard arcana of quintessentially Canadian conclusions again applies to five more areas of health care assessed by the Health Council of Canada in its ongoing review of progress in achieving renewal of the health care system.

In its 2011 report, the council had found that there was some measure of progress, at best, in five areas — wait times, pharmaceutical management, electronic health records, teletriage and health innovation — in which government commitments had been made in 2004 by Canada’s First Ministers in the 10-Year Plan to Strengthen Health Care, as well as in the 2003 First Ministers’ Accord on Health Care Renewal. (www.cmaj.ca/lookup/doi/10.1503/cmaj.109-3912).

In its *Progress Report 2012: Health care renewal in Canada*, the council turns its attention to five additional areas in which commitments were made, i.e., home and community care, health human resources, telehealth, access to care in the North and comparable health indicators (http://healthcouncilcanada.ca/tree/ProgressReport2012_FINAL_EN.pdf).

The bottom line?

Change has generally been incremental, if it has occurred at all.

“The evidence suggests that the accords were designed more to put all provinces and territories on an equal footing than to push them consistently toward excellence in health care. While vague commitments coupled with low expectations may facilitate agreement among different jurisdictions, they do not represent a good recipe for yielding

improvements in health system performance. As a result, in the areas that this report covers, the accords have not brought about the large scale change that was envisioned when they were created. While these accords were intended to deal with the health care challenges at the time, the country is still grappling with many of the same challenges today.”

The main reason for the lack of progress is that the commitments were often vague and the accountability mechanisms even vaguer, the report states. “The accords did not, by and large, set out clear parameters for change, or the type of reporting that would be useful to the jurisdictions to measure such change. First Ministers did establish a series of comparable indicators for the provinces and territories to report on in 2004. However, their reporting only lasted a few years. Since then, the provinces and territories have developed their own indicators to address their respective planning needs. As a result, they do not consistently report on progress in the same manner, particularly in a comparable way that is useful to other governments and the public.”

By area, the latest findings of the council were:

Home and community care

Accord commitments included ones that compelled governments to provide first-dollar coverage (in which a government or insurer assumes liability for services as soon as first dollar of expense is incurred, without requiring a patient or insured person to pay a deductible) for two weeks coverage of short-term post-acute home and mental care, as well as aspects of end-of-life care.

The verdict: Although it took longer than promised, most provinces have now met the commitment to provide short-term post-acute home care. “Jurisdictions are moving forward on mental health strategies, but these are not being developed under the home care umbrella,” while progress on end-of-life care has been “variable in terms of what services are covered in each jurisdiction.” With regard to identifying the needs of home care patients, “eight jurisdictions are at some stage of implementing the Resident Assess-

ment Instrument-Home Care (RAI-HC), a standardized clinical assessment designed to assess the needs of clients requiring long-term home care.”

Health human resources

The accords vaguely promised to increase the supply of health professionals, based on the gaps perceived by governments.

The verdict: The number of health professionals has increased and most provinces have some manner of health human resource strategy, although those are often cliché-ridden. “The accords provided direction on the need to undertake collaborative health human resources planning. While many jurisdictions created strategies independently, most did not set out specific supply targets. Over time, many provinces and territories have updated their strategies, though they often do not contain targets. Instead, these strategies speak to the need for action on health human resources with most discussing common themes: increasing health human resources supply through education, recruitment, and retention initiatives; making more effective use of providers’ skills; creating healthy and safe workplaces; and improving planning and forecasting.” As well, there’s no evidence of anything like a national plan based on an appropriate mix of required health professionals.

Telehealth

The accords vaguely committed the governments to work with Canada Health Infoway to improve telehealth access for residents of remote and rural communities.

The verdict: All jurisdictions, except for Prince Edward Island, have tapped a \$108 million federal pool of monies to expand telehealth, and each has a telehealth strategy of some fashion and pilot projects underway. “However, consideration needs to be given to how to transform Canada’s many successful pilot projects into sustained initiatives. The accord commitments were not target specific. However, it is essential to establish realistic targets and methods to assess how telehealth programs are achieving their projected benefits and sustaining the adoption of telehealth in each jurisdiction.”

Access to care in the North

The federal government promised to invest \$150 million over five years for health reforms in the North.

The verdict: While a federal program was established, “it is difficult to say” whether it has achieved such objectives as decreased reliance on acute or primary care and strengthened community-level services as “performance reporting in the territories is scant.” As well, there is a need to extend such programming to all resident of northern communities

within provinces that “face similar access to care challenges, so that all Canadians have equitable access to health care.”

Comparable health indicators

The accords promised to develop and use comparable and transparent health indicators to improve accountability within the health care system.

The verdict: Some 18 indicators were agreed to and now serve as the basis for some national comparisons. But the provinces and territories have also “developed their own reporting mechanisms tailored to their own needs, whether for planning, measuring performance, or accountability. These have resulted in a range of reporting systems that account for the use of public funding, the status of health care reform, health outcomes, and the health status of the population. While all jurisdictions report to the public, the level and detail of reporting, particularly health system reporting, varies significantly. This is due in large part to their capacity to collect, interpret, and report on health data. Overall, some jurisdictions have made strides in assessing and comparing performance internally, but their public reporting is often done in a manner that limits external comparability.” — Wayne Kondro, *CMAJ*

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