

FOR THE RECORD

Health note-taking becoming the norm

An increasing number of Americans are using health technologies such as smartphone applications to track their ailments, according to the Pew Research Center.

Roughly 20% of Americans now use mobile devices to collect data on health indicators such as weight, diet and exercise routines, or symptoms such as blood sugar levels, heart rate, headaches or sleep patterns, states a report, *Tracking for Health, from the Center's Internet and American Life Project* (www.pewinternet.org/~media/Files/Reports/2013/PIP_TrackingforHealth.pdf). Roughly 70% of Americans conduct some manner of health tracking. Some 49% of those track data “in their heads,” while 34% keep their health notes on paper and 21% use technology.

Irrespective of the method, all respondents to the centre's telephone survey of 3014 American adults indicated that health tracking has substantially altered people's approaches to the management of their own health.

About 63% of all health trackers believe that collecting data has affected their overall approach to health, the report states. Some “46% of trackers say that this activity has changed their overall approach to maintaining their health or the health of someone for whom they provide care. 40% of trackers say it has led them to ask a doctor new questions or to get a second opinion from another doctor. 34% of trackers say it has affected a decision about how to treat an illness or condition.”

That's particularly true of people living with chronic health conditions, the report adds. As well, “caregivers and trackers who had experienced a recent, significant health change are also more likely than other groups to report an impact. Trackers who keep formal records, such as on paper or using tech-

nology, are also more likely than others to report an impact.”

The survey also indicated that people are more likely to track health indicators or symptoms if they live with chronic conditions, particularly high blood pressure and diabetes.

About half of the 34% of health trackers who share their records with another person, do so with a clinician, the survey added. Those most likely to share the data with a clinician are people who are living with two or more chronic conditions. “By comparison, 35% of trackers with 1 condition share their notes; of those, 57% share with a clinician. Just 30% of trackers who report no chronic conditions share their notes; of those, 37% share with a clinician.”

The report also notes that there are demographic differences in the subpopulations that are most likely to undertake health tracking. “In the general population, women and men are equally likely to report tracking their weight, diet, or exercise routine. Non-Hispanic whites and African Americans are more likely than Latinos to track these basic health indicators: 62%, 59%, and 51% of each group respectively do so. Older adults are more likely than younger ones to track their weight, diet, or exercise routine: 71% of those ages 65 and older do so, compared with 61% of 18-29 year-olds, for example. Sixty-eight percent of college graduates track their weight, diet, or exercise routine, compared with 54% of adults with a high school diploma and 43% of those who have not graduated from high school.”

Caregivers are also more likely to keep track of health symptoms, such as blood pressure, both for the people they care for (31%) as well as for themselves (64%).

There are also demographic differences with respect to the groups most likely to use technologies for health tracking. “Women, those under age 50, those who are better educated, and those with an annual household income

over \$75,000 are more likely to have downloaded a health app.”

Industry reports indicate that there are currently more than 500 firms developing health self-management tools and that there are now more than 13 000 health and fitness apps that have been created. Health market consultant IMS research estimates that 50 million wireless health monitoring devices will be purchased globally over the next five years (http://imsresearch.com/press-release/Consumers_Not_Telehealth_Patients_to_Drive_Adoption_of_Wireless_Technology_in_Medical_Devices&from=all_pr). — Wayne Kondro, *CMAJ*

Avoid those chicken salad lettuce wraps

Lettuce and other leafy vegetables were the commodity group responsible for the greatest percentage of food-borne illnesses in the United States over a two-decade period, while contaminated dairy products caused the most hospitalizations and chicken the most deaths, according to the US Centers for Disease Control and Prevention (CDC).

Mushrooms, though, appear to be among the safest foods to consume, as the commodity group “fungi” was responsible for the fewest number of food-borne illnesses, hospitalizations and deaths between 1998–2008 in the US, in which roughly nine million food-borne illnesses occurred annually, the CDC states in a study, *Attribution of Foodborne Illnesses, Hospitalizations, and Deaths to Food Commodities by using Outbreak Data, United States, 1998–2008* (http://wwwnc.cdc.gov/eid/article/19/3/11-1866_article.htm).

CDC used state and local health department reports of food-borne illness outbreaks involving a single etiologic agent to first calculate the overall percentage of food-borne illness in 17

food commodity groups, and then rank order those groups. “During 1998–2008, a total of 13,352 foodborne disease outbreaks, causing 271,974 illnesses, were reported in the United States. Of those outbreaks, 4,887 (37%), causing 128,269 (47%) illnesses, had an implicated food vehicle and a single etiology; 300 of those outbreaks were excluded because information about the vehicle was insufficient to categorize the ingredients. We also did not include the 3% of outbreaks that had multiple etiologies reported.”

The five commodity groups that caused the most illness, hospitalization and death were leafy vegetables, dairy, fruits-nuts, poultry and vine-stalk vegetables. Leafy vegetables caused the most illnesses. Dairy products caused the most hospitalizations and poultry (primarily through the pathogens *Listeria monocytogenes* or *Salmonella*) the most deaths (<http://wwwnc.cdc.gov/eid/article/19/3/11-1866-f2.htm>).

The five commodity groups causing the fewest deaths were (in ascending order); fungi, crustacean, oils-sugars, game and mollusk. The five causing the few hospitalizations were: fungi, game, crustacean, oils-sugars and sprout-vegetables.

The pathogen responsible for the most “outbreak-associated” illnesses was norovirus — 29 outbreaks and 41 257 illnesses, well above the median (29 outbreaks and 1208 illnesses) for the 36 agents that were examined.

The report then applies the percentages arrived for each etiology to the 9.6 million annual number of cases of reported food-borne illnesses, “and attributed ≈4.9 million (≈51%) to plant commodities, ≈4.0 million (≈42%) to land animal commodities, and ≈600,000 (≈6%) to aquatic animal commodities. Produce commodities (fruits-nuts and the 5 vegetable commodities) accounted for 46% of illnesses; meat-poultry commodities (beef, game, pork, and poultry) accounted for 22%. Among the 17 commodities, more illnesses were associated with leafy vegetables (2.1 million [23%]) than any other commodity.”

“An estimated 26,000 (46%) annual hospitalizations were attributed to land animal commodities, 24,000 (41%) to plant commodities, and 3,000 (6%) to

aquatic animal commodities. Produce commodities accounted for 38% of hospitalizations and meat-poultry commodities for 22%. Dairy accounted for the most hospitalizations (16%), followed by leafy vegetables (14%), poultry (12%), and fruits-nuts (10%).”

“An estimated 629 (43%) deaths each year were attributed to land animal, 363 (25%) to plant, and 94 (6%) to aquatic commodities. Meat-poultry commodities accounted for 29% of deaths and produce 23%,” the study adds.

The report argues that the findings point to the need to place a greater emphasis on reducing contamination of produce and poultry products. But it also cautions that a balanced approach to regulation is appropriate: “The attribution of food-borne-associated illnesses and deaths to specific commodities is useful for prioritizing public health activities; however, additional data on the specific food consumed is needed to assess preserving risk. The risk for food-borne illness is just one part of the risk–benefit equation for foods; other factors, such as the health benefits of consuming a diet high in fruits and vegetables, must also be considered.” — Wayne Kondro, *CMAJ*

Adverse drug reaction reporting

Canadian hospitals and other health facilities will be asked to voluntarily comply with new Medication Management Standards aimed at achieving more systematic reporting of all adverse drug reactions, Federal Minister of Health Leona Aglukkaq has announced.

“The adverse reaction reporting component provides guidance on issues such as how to report patients’ adverse reactions to drugs, and who is responsible for reporting them. The standards will encourage consistency in reporting practices and will strengthen and complement any reporting systems already in place,” Health Canada stated in a press release (www.hc-sc.gc.ca/ahc-asc/media/nr-cp/_2013/2013-01-eng.php).

The initiative will be complemented by a communications campaign aimed at promoting adverse drug reaction reporting. “Our Government is commit-

ted to protecting the health and safety of Canadians,” Aglukkaq stated in the release. “This initiative supports Health Canada’s ongoing efforts to increase the quality and quantity of adverse reaction reports, an important part of our drug safety monitoring system.”

As part of the campaign, Health Canada will place notices in health journals and “distribute adverse reaction reporting forms with instructions to selected health associations, physicians and pharmacists, and facilities.”

“The new reporting standard stems from Health Canada’s consultations with provinces and territories, health professionals, industry, and the Canadian public regarding ways to address the under-reporting of adverse drug reactions in Canada,” Health Canada added in the release. “Much feedback, particularly from provinces and health professional associations, supported the development of a hospital-based adverse reaction reporting standard as an alternative to a legislative requirement.”

Accreditation Canada indicated that it would post the guidance and revised Medication Management Standards on its website (www.accreditation.ca/en/).

The system will ask hospitals and other facilities to continue reporting incidents through the existing Canada Vigilance Adverse Reaction Reporting Form (www.hc-sc.gc.ca/dhp-mps/medeff/report-declaration/ar-ei_form-eng.php). — Wayne Kondro, *CMAJ*

Baby boomers an indulgent lot

Canadian baby boomers haven’t made the lifestyle changes needed to avoid spending the last decade of their lives in “sickness, disability and immobility,” according to the Heart and Stroke Foundation, Canada.

Boomers are prone to “physical inactivity, poor diet, smoking, stress and excessive alcohol consumption,” the Foundation states in a report *Reality check: Boomer dreams for later life may not come true* (www.heartandstroke.com/atf/cf/%7B99452D8B-E7F1-4BD6-A57D-B136CE6C95BF%7D/Report-on-Cnd-Health—D17.pdf).

The report notes that:

“The majority maintain a poor diet

- Eighty-five per cent don’t eat enough vegetables and fruit each day and 19 per cent consume far too much sodium

Too many are sedentary

- More than 40 per cent said they are not moderately active for 30 to 60 minutes at least three times a week

They are too stressed

- The large majority of boomers report being stressed at times, and close to 30 per cent say they are often or always stressed

Too many that smoke

- One in five (21 per cent) smoke

Too many drink excessively

- 1 in 20 boomers (5 per cent) drink excessively, while 12 per cent are heavy drinkers.”

“We typically think teenagers are the ones who live like they’re invincible, but boomers seem to forget their mortality too,” David Sculthorpe, CEO of the foundation stated in a press release (www.heartandstroke.com/site/apps/nlnet/content2.aspx?c=ikIQLcMWJtE&b=3485819&ct=12941223).

The report urges boomers to use an online tool (<http://makehealthlast.ca/>) to assess their health risks and make the suitable lifestyle changes.

“The lifestyle choices that Cana-

dian boomers are making directly contribute to living the last 10 years of their lives in sickness. This should cause boomers a lot of concern,” Heart and Stroke Foundation spokesperson Dr. Beth Abramson stated in the press release. “The good news is that if lifestyle changes are made now, many Canadians can considerably reduce the effects of heart disease and stroke. It is possible for us to take charge of our heart health, reduce hospitalizations and immobility, significantly improving the quality of our lives.” — Wayne Kondro, *CMAJ*

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