

Challenges and Opportunities: Results of the 2013-2014 Health Care in Canada Survey

Sara Ahmed, Lucas Marshall, Amédé Gogovor, Wendy Morton, Jill Norman, Joanna Nemis-White, Terrence Montague, for Health Care in Canada Survey Members

Abstract

This paper reports results of the 2013-2014 Health Care in Canada survey of public (n=1000), physician (n=101), nurse (n=100), pharmacist (n=100) and administrator (n=104) perceptions of national health, prevalence and care of chronic illnesses, compares data with previous results, and identifies preferred innovations to make future care better. We conclude the general health of the nation is decreasing; and, the burden of chronic illness is increasing. Timely access to care remains a top-of-mind issue. However, key improvement opportunities beckon, driven by pan-stakeholder valuing of increased communication, home, community and patient self-management programs; and team-oriented, patient-centred care. Things can be better.

Beginning in the last decade of the 20th century, the Health Care in Canada survey (HCIC) partners have repeatedly sampled public and professional perceptions around the outstanding issues and opportunities in the Canadian health universe. Principal foci of previous surveys included: the general health of the nation; the burden of chronic diseases and their care, particularly gaps in evidence-based and team care; and, innovation opportunities to improve care and outcomes (1). This paper returns to those foci, summarizing new information from the eleventh, 2013-2014, edition of the HCIC survey, highlighting similarities that have persisted, changes that have occurred and opportunities that loom in this increasingly important realm of health care.

Our members and our methods

Since inception in 1998, the group of institutional members forming the HCIC partnership has varied; and, expanded. For the 2013-2014 edition, the members were the: Canadian Cancer Society (CCS); Canadian Foundation for Healthcare Improvement (CFHI); the newly merged organizations of the

Canadian Healthcare Association (CHA) and Association of Canadian Academic Healthcare Organizations (ACAHO); Canadian Home Care Association (CHCA); Canadian Hospice Palliative Care Association (CHPCA); Canadian Medical Association (CMA); Canadian Nurses Association (CNA); Constance Lethbridge Rehabilitation Center, *Centre interdisciplinaire de recherche en réadaptation* (McGill University); Health Charities Coalition of Canada (HCCC); Institute of Health Economics (IHE); Institute of Work and Health (IWH); and Merck Canada Inc. Project management was provided by Strive Health Management. **CareNet** Health Management Consulting delivered survey oversight and leadership.

The HCIC methodology has been consistently robust in all iterations. As in previous years (1), the current survey was conducted by POLLARA Strategic Initiatives. However, for the first time, the survey was administered online, using a POLLARA proprietary panel, as opposed to all previous surveys which utilized telephone interviews. Briefly, nationally representative samples of members of the adult Canadian public and key professional groups, doctors, nurses, pharmacists and health administrators, were polled between November 2013 and January 2014.

All questions for HCIC 2013-2014 were developed, in French and English, by POLLARA, in repeated consultations with HCIC partners. The survey consisted of 37 detailed questions for health care professionals (physicians, nurse, pharmacists and administrators); and, 56 for the general public - covering multiple care domains (Table 1).

TABLE 1: Key domains covered in the HCIC Survey

Public	Professional
Trends in quality and access of care	Trends in quality and access of care
Health / care personal values	Health / care personal values
Social determinants of health	Social determinants of health
Health status	Health status / workplace engagement
Chronic disease	Chronic disease
<ul style="list-style-type: none"> • Prevalence • Management • Patient-centred care • Caregiving • Future innovations / responsibilities 	<ul style="list-style-type: none"> • Prevalence • Management • Patient-centred care • Future innovations / responsibilities

Characteristics of survey participants

There were 1000 participants in the public population sample; 49 percent were male. The average, non-weighted age of the public sample was 50 (±15) years; 5 percent of individuals were 18-24 years; and, 22 percent were ≥ 65 years. The weighted survey data reflected the 2011 Canadian Census general population data in terms of age, sex and regional variables.

One hundred and one physicians were sampled; 81 percent were male. The nursing sample size was 100; 9 percent were male. Forty eight percent of pharmacists (n=100); and, 41 percent of health administrator participants (n=104) were male. The majority of the professional provider groups had eleven or more years of practice experience: physicians, 94 percent; nurses, 72 percent; pharmacists, 64 percent; and, administrators, 56 percent.

The error margin at the 95 percent confidence interval for the online public sample population is estimated to be ± 3.1 percent. The estimated margins of error, again at the 95 percent confidence interval, are respectively: ± 9.6 percent for administrators, ± 9.7 percent for doctors, and ± 9.8% for nurses and pharmacists.

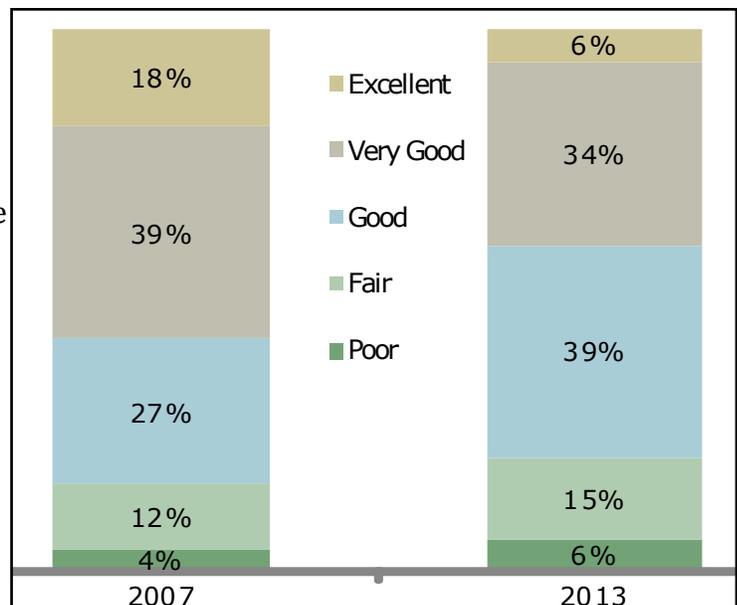
Population Health Status and the Burden of Chronic Illness in Canada

The great majority (79 percent) of adult Canadians continue to perceive themselves to be in good to excellent general health (Figure 1), although

slightly less, on average, than the 84 percent response rate in the 2007 HCIC survey (1); and also less than the level of 86 percent reported in a recent Harris-Decima survey (2).

Only forty percent reported they were in very good or excellent health, a decline from 57 percent in 2007 (1). This current level of self-reported very good-to-excellent health was also less than the perceived health assessments of adolescents and adults in the 2012 Statistics Canada Community Health Survey, where 60 percent judged themselves to be in very good or excellent health (3).

FIGURE 1. Comparison of the Canadian adult populations' self-reported health status, 2007 versus 2013, when asked the question: "In general, how would you rate your health?"



There was a decrease with age in the reported level of good to excellent health status. And, there were also differences related to sex and income. Specifically, women were more likely to report they were in excellent or very good health than men (45 percent versus 36 percent, respectively). And, excellent or very good health increased in prevalence from 28 percent among those earning <\$50k per annum, to 45 percent among those earning \$50k-\$100k; and, to 51 percent among people earning >\$100k.

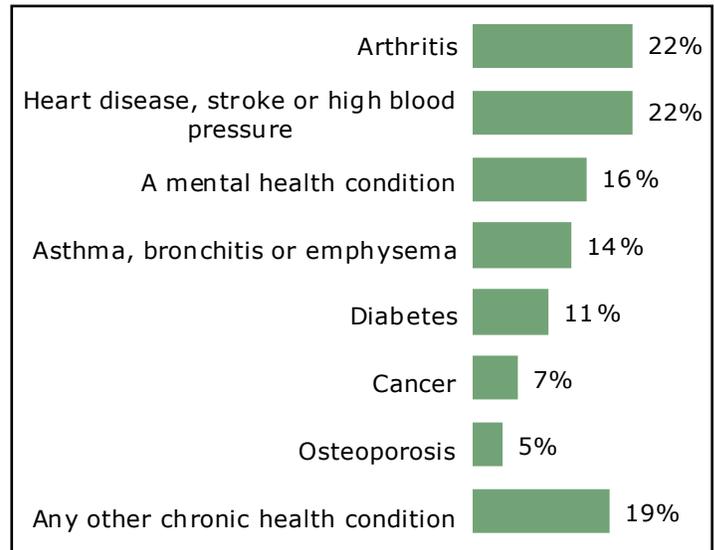
The Burden of Chronic Disease in Canada

The self-reported prevalence of one or more chronic diseases among the general adult population of Canada averaged 58 percent in 2013-2014, a marked increase over the 37 percent prevalence reported in 2007 (1). Prevalence ranged from a high in Atlantic Canada (77 percent), to a low in Quebec (51 percent). These geographic distributions are similar to those reported in the 2007 HCIC survey (1); and, the 2013 Commonwealth Fund International Health Policy survey of the general public (4). The prevalence of the most frequent specific chronic diseases in Canadian adults is illustrated in Figure 2.

Most of the major chronic diseases, e.g., arthritis, heart disease, stroke or high blood pressure, were directly related to age in terms of prevalence. For example, the prevalence of arthritis ranged from 8 percent in the population less than 45 years to 41 percent in people 65 years and older. In contrast, mental health disorders, exhibited a reverse age trend. Its prevalence (20 percent) was higher among those aged 18-45 years and lower (5 percent) among those aged 65 and older.

In terms of sex distribution, females' average prevalence (62 percent) of chronic diseases was higher than males (54 percent). Overall chronic disease prevalence was inversely related to income: highest (61 percent) among persons with an annual household income < \$50,000; and, lowest (48 percent) among people with household incomes of

FIGURE 2. The relative prevalence of the major chronic diseases in Canada (2013-2014), when the public was asked: "Have you been diagnosed by a physician with any chronic conditions or illnesses such as asthma, arthritis, diabetes, heart failure or high blood pressure?"



\$100,000 or higher. This was particularly noticeable among patients with arthritis, diabetes and mental health disorders. These age, sex and income distributions for chronic illness prevalence in the Canadian population are directionally very similar to findings in previous HCIC surveys (1).

The importance of age to the population burden of chronic disease was also reflected in the reported presence, and number, of medications being used by patients. For example, among 25 to 34 year olds with a chronic illness, 69 percent reported they were taking at least one regularly prescribed medication, versus 84 percent for people 65 and over. In the latter group, the average number of per-person medications was 4.3 (versus 2.7 among those 18-44).

Interestingly, in the public's reply to the question: "What is the most important health care issue facing Canada today?", only eight percent of respondents identified an aging population as Canada's most important health care issue, unchanged from 2007 (1) and in a tie with care affordability for third place, below wait times (31 percent) and shortages of doctors (16 percent) in terms of priority. Likewise, the aging population is

in third or fourth place among health professionals, behind excessive wait times and accessibility, as the top priority concerns for nurses, doctors and pharmacists.

Thus, the overarching, and practical, social and economic impacts of the relation between chronic disease burden and the increasing aging of our population may not be generally perceived by all stakeholders, even in the face of the very rapid rise of age-related dementia as the projected leading contender of future population morbidity and mortality (5).

On the other hand, the relatively low ranking of age as an issue may reflect a more optimistic belief that healthy aging is possible with ready access to affordable care providers, services and efficacious therapies.

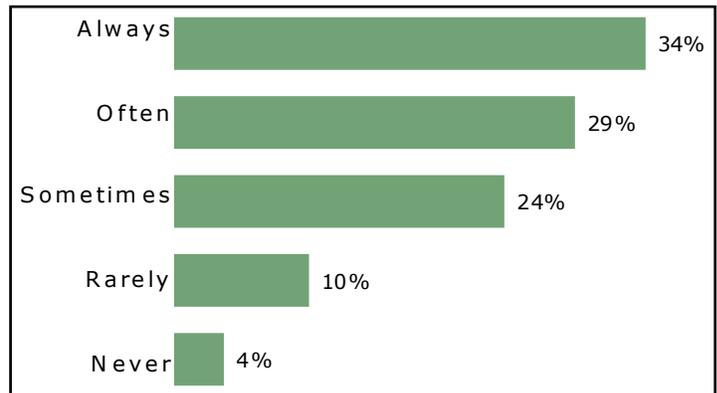
Caring for Patients with Chronic Disease

Access to needed care has consistently been (1), and remains, a top-of-mind issue for the general public and patients with chronic disease. In 2013-2014, 63 percent of adult Canadians suffering a chronic condition reported often, or always, receiving the support they needed from health care professionals to help them manage their condition(s) (Figure 3), although the rate was somewhat lower for those with annual household incomes lower than \$50,000 (57 percent), compared to those from a higher income category (65 percent).

Interestingly, older patients were more likely to always, or often, receive the support they need, with patients 65 years and older reporting a 77 percent frequency, compared to 62 percent for patients aged 45 to 64 years; and, 51 percent for patients 18 to 44 years of age.

Similarly, when patients with a chronic condition were interrogated on the availability of the information they need to help manage their care, the majority

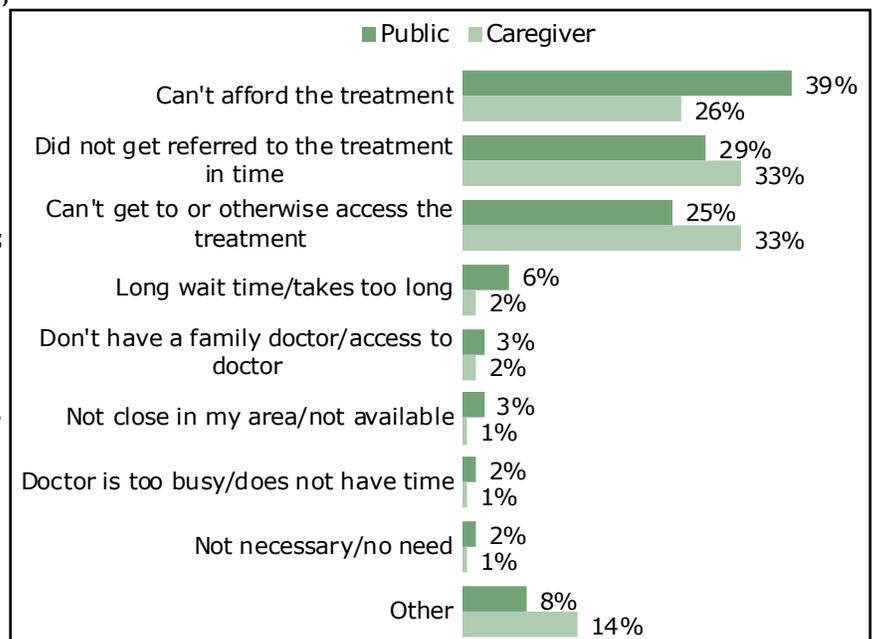
FIGURE 3. Reported availability of professional care for chronic disease patients when they were asked: “Do you receive the support that you need from health professionals to help you manage your condition(s)?”



(68 percent) said they always, or often, have such access. As with access to professional support, information access rose with patient age.

For the 35 percent of patients with chronic illnesses who had access to treatments only sometimes (23 percent), rarely (9 percent) or never (3 percent), there were a variety of reported reasons, but the primary impediment was inability to afford the treatment, followed by non-timely referral (Figure 4). The hierarchy of perceived treatment

FIGURE 4. Comparison of responses of adult patients with one or more chronic diseases in the general public and non-professional caregivers when asked: “What are some of the reasons why you (or your patient relative / friend for whom you provide care) don’t always have access to the treatments you need to manage your condition(s)?”



impediments was very similar when patients' non-professional family or friend caregivers were also asked the same question (Figure 4).

As alluded to above, an important, and growing, reality for the care of chronically ill patients is that care delivery, or patient support, does not fall solely on individual patients and their care-providing professionals. There are also very significant personal and fiscal impacts on the families and friends of patients with chronic illness. In the 2013-2014 HCIC survey, 19 percent of the general adult Canadian public reported they personally cared for a sick family member or close friend in the past 12 months, similar to the 23 percent reported in the 2007 HCIC survey (1) and very similar to recent data from United States (6).

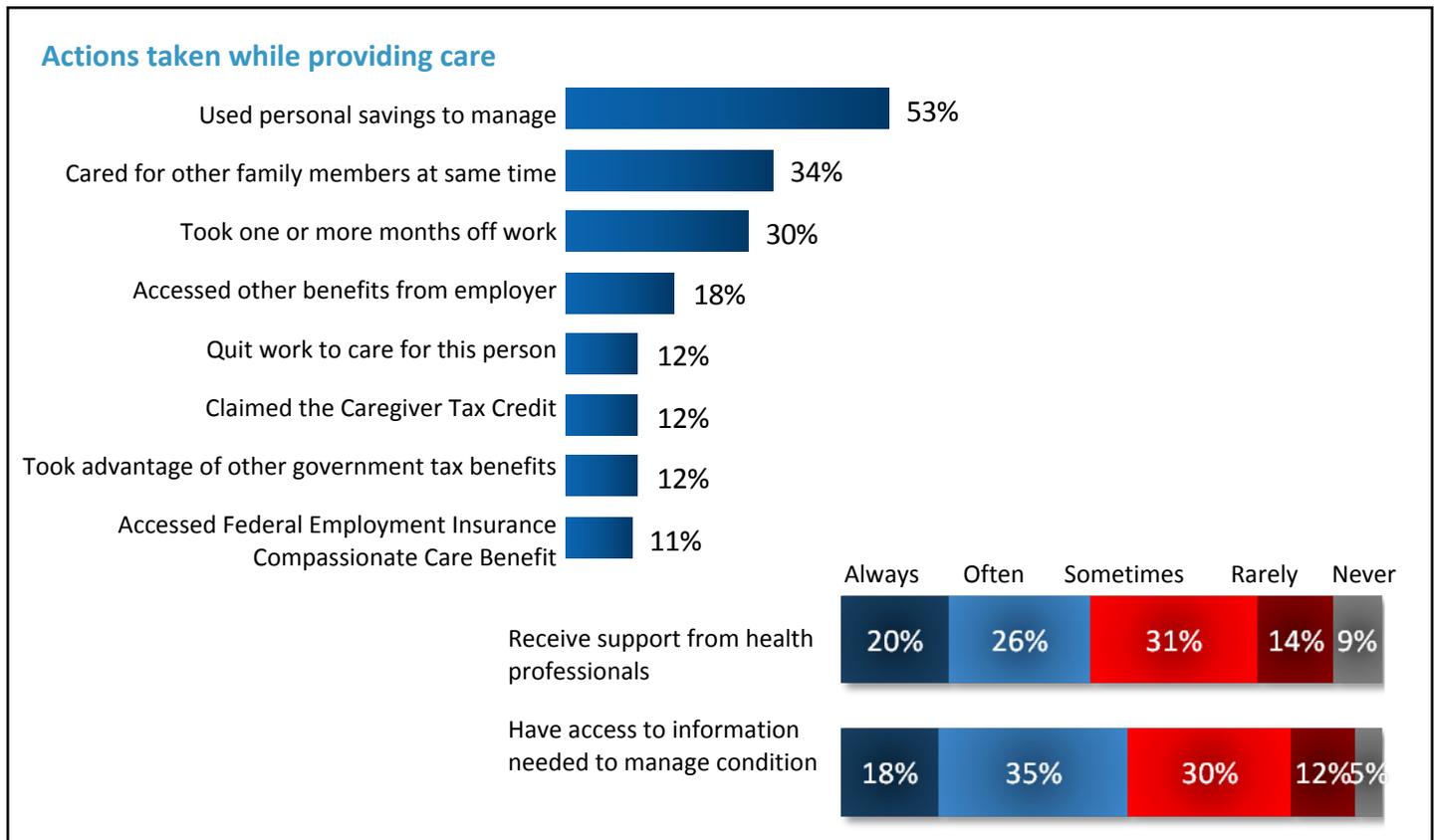
The spectrum of contributions from non-professional family and friend caregivers, their burden of personal costs and areas of support, are summarized in Figure 5. Demographically, they reflect the general population, equally distributed

in terms of sex and with an average age of 48 years. Noteworthy is that 71 percent of these non-professional caregivers report having, themselves, one or more chronic diseases, with a disease specificity very similar to the patients for whom they provide care.

Although the estimated total contributions of dollars, time and commitment, of non-professional caregivers are enormous (6), few of these good people seem to take advantage of existing government benefits for support (Figure 5). One other point of interest, patients who have non-professional caregivers are more commonly involved in a team, or coordinated, care environment (29 percent) than patients with chronic illnesses in general (19 percent). Why this is so remains speculative.

As indicated in Figure 4, and perhaps not surprisingly, non-professional care givers sense very similar impediments to their patients in obtaining support, information and access to

FIGURE 5. Multiple actions / contributions / support, in care and cost, as well as low level of use of potential benefits, for non-professional family and friends who assist in looking after patients with chronic illnesses.



needed treatments for their patients. Only 50 percent report always, or often, having access to needed treatments; and, the top three impediments are the same as perceived by patients.

Overall, the data suggest that non-professional caregivers are essentially average people in our adult population, who, despite having a significant burden of their own chronic diseases, provide seemingly an altruistic care investment to family members and friends, with little demand, or concern, for return on the investment.

Lastly, an important aspect of health care for patients with chronic diseases that became apparent in the 2013-2014 HCIC survey is their level of need for acute care assessment and management. Within the past year, 21 percent reported emergency room visits; and, 15 percent were admitted to hospital due to their condition. It seems reasonable to anticipate if community-based chronic care models and interventions (7, 8) become more prevalent, one result might be less need for acute care interventions.

Going Forward – Emerging Issues and Options to Improve

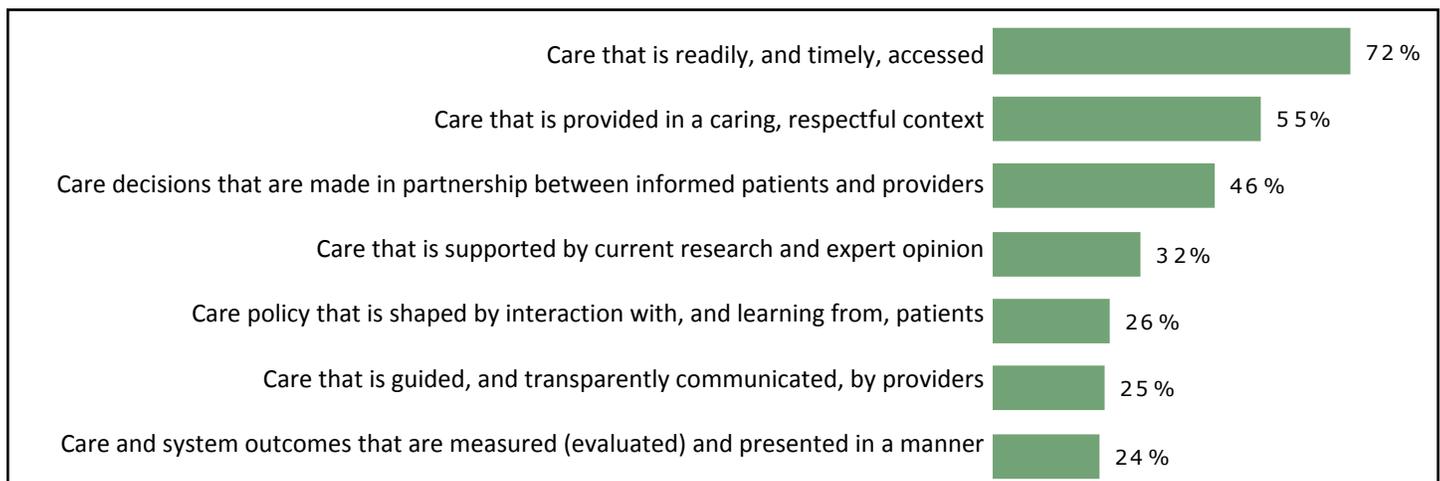
Health care is changing. In particular, there is a rapidly growing older population with a high burden of chronic diseases and persistent gaps between usual care and best care (8). The cost of

care is steadily escalating and an increasing proportion is privately funded; and, privately delivered. Medical science has produced many efficacious treatments for numerous disease challenges, including society’s most burdensome ones, like heart disease. Large academic, medical, technical and policy bureaucracies have grown up - at local, regional, provincial and national levels - to help manage care. And, one fifth of the general adult Canadian population are contributing caregivers for a family member or friend with one or more chronic illnesses.

It may be particularly important to expeditiously address this latter burden on society that, without proper supports, may have a negative impact on individual and national productivity, the sustainability of our health care system and, ultimately, the general economy of the nation.

A practical risk in the face of these large, and sometimes competing, interests is that patients’ interests may not always be a central concern. Increasingly, however, an enhanced awareness of value and the moral authority embodied in patient-centred care - putting patients and their interests first in health care decisions - is rising to the forefront of thinking among many health stakeholders (9, 10). The data summarized in Figure 6 outline the public’s sense of the essential priorities in this evolving care philosophy, which

FIGURE 6. Top ranked important initiatives to improve patient centred care when the public was asked: “Which three attributes would you most strongly support?”



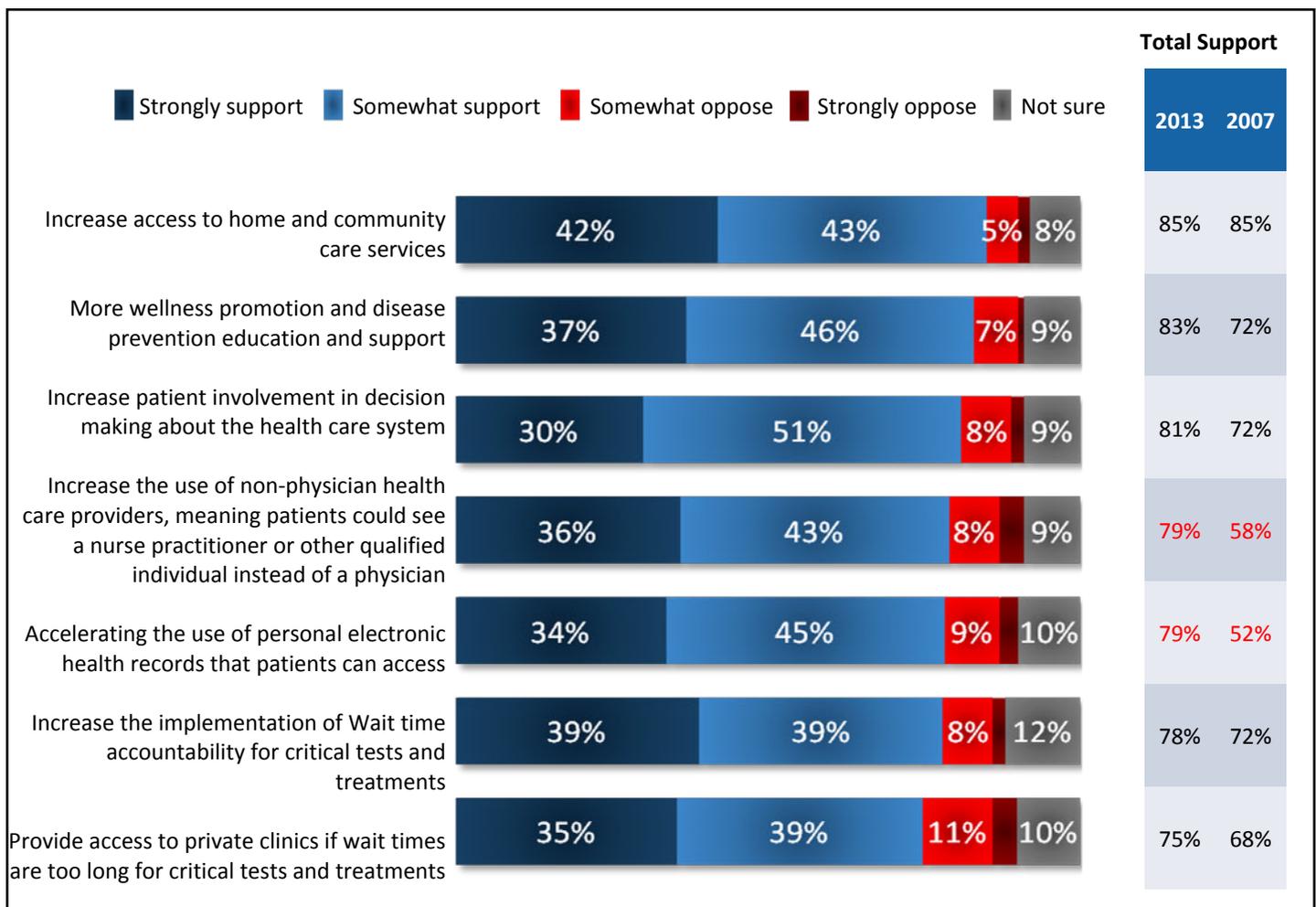
are very similar to the reported priorities of professional and non-professional caregivers.

In the world of chronic care and disease management, a dominant challenge, and opportunity for improvement, is the presence of care gaps in every major disease. Patients are in care gaps because they do not have access to care, or have not been diagnosed, or not prescribed proven therapy, or they cannot, or will not, adhere with prescribed treatment. They are on a kind of invisible waiting list. And, care gaps will remain invisible unless sought and discovered through systematic measures of practices (8).

An over-arching mantra is that care gaps can be narrowed or closed. Getting to better outcomes involves health promotion and disease prevention,

as well as team-based interventions beyond pharmaceutical and surgical therapies, particularly patient-centred, community-based health social networks highlighting measurement and its feedback communication, as well as health education and new knowledge translation – all of which can produce a Hawthorne-like effect to improve care and patient outcomes (7, 8, 11). In the 2007 HCIC survey, there was generalized consensus on implementation of chronic disease management programs; and, many of its specific components and processes, including: home and community care; patient self-management; and, for more wellness promotion, prevention and education interventions (1).

FIGURE 7. Top ranked initiatives to improve care in disease management when the public were asked: “Here are a list of initiatives that may lead to a better health care system. Thinking of how effective these might be, indicate the degree to which you support or oppose the implementation of these initiatives.”



In 2013-2014, pan-stakeholder support remained high for the implementation of disease management programs to manage chronic care, averaging 81 percent among the public and 81 percent across physician, nurse, pharmacist and administrator groups. Key specifics of the public's strong support for components of disease management are illustrated in Figure 7. Two proposed initiatives, in particular, significantly increased their level of support since 2007. They were the increased use of qualified non-physician professional care; and, increased use of electronic health records (Figure 7).

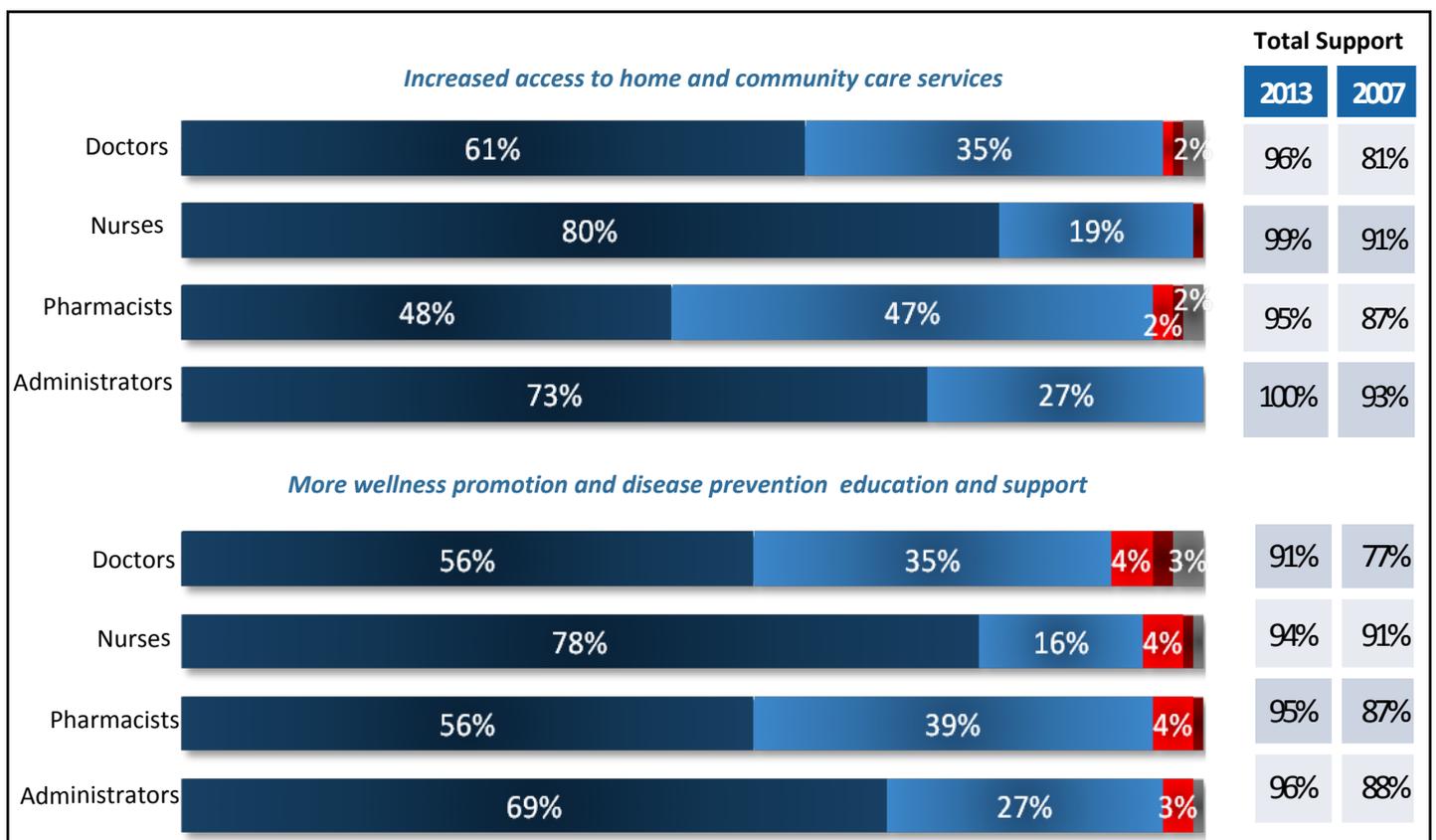
Health professionals were similarly bullish on key disease management initiatives, as illustrated in Figure 8. Other initiatives increasingly supported by professionals in 2013-2014, included: patient involvement in decision making about the health care system (total support averaging 87 percent among the four professional groups, versus 75

percent in 2007), increasing wait time accountability for critical tests and treatments (91 percent versus 74 percent); and, accelerating the use of electronic health records that patients can access (82 percent versus 72 percent in 2007).

Increasing regular communication among providers and patients regarding test results, enhancement of adherence and education to support patient self-management, were also strongly advocated across the professional spectrum at the 80 to 90th percentile level. This high and increasing support for optimizing inter-stakeholder communication is potentially very important - because frequency of communication is at the centre of health social networks' efficacy in driving improvement in care and outcomes (11).

One area of inquiry in 2013-2014 with somewhat lesser concordance among professionals was the suggestion to increase the use of non-physician professional health care providers, meaning, for

FIGURE 8. Highly ranked initiatives to improve care in disease management when health professionals were asked: “Here are a list of initiatives that may lead to a better health care system. Thinking of how effective these might be, indicate the degree to which you support or oppose the implementation of these initiatives?”



example, patients might not see a doctor when similar care could be achieved by other providers such as nurses or pharmacists. This proposal was strongly, and increasingly, supported by nurses (94 percent in 2013-2014, versus 87 percent in 2007) and pharmacists (95 percent currently, versus 79 percent previously). Physicians also voted in the majority, at 62 percent, also increased from 55 percent in 2007, while administrators' support dropped slightly from 92 percent in 2007 to 83 percent in 2013-2014.

Discussion

In summary, key findings of this contemporary HCIC survey into chronic care and disease management in Canada reinforce many of the insights derived from the previous survey of 2007.

On the down side, chronic diseases continue to be common, age-related and burdensome for patients, their caring families and friends. On the upside, patient-centred care and coordinated, team-based, community-oriented disease management interventions are increasingly supported by the majority of stakeholders, especially for areas like home care, wellness promotion, patient education and involvement in decision making and self-management. Although professional provider role-sharing continues to have mixed support, support for the use of electronic health records medical records has markedly increased over the course of the last several years. Other positively evolving issues include the important recognition of the contributions made by non-professional caregivers and the moral authority of patient-centricity in health care.

Unique strengths of the 2013-2014 HCIC survey results, like all its predecessors, are ability to compare simultaneously acquired perceptions of multiple professional stakeholders, the general public and patients with chronic diseases, coupled with the ability to compare temporal trends in targeted areas of interest. The potential weakness of the HCIC results, like all survey-based data, is

their self-reported origin and, therefore, comparison with data from other sources is very helpful for interpretation. And, previous comparisons of HCIC results with other contemporary studies have demonstrate compatibility (1).

Two results, however, stand out in the 2013-2014 HCIC data. They are the decreased levels of very good- to-excellent general health; and, increased levels of chronic disease in our national adult population. In particular, the 51 percent prevalence of chronic disease represents a 38 percent increase from the 2007 HCIC survey prevalence of 37 percent (1); that is, an average six percent per year increase.

One possible explanation contributing to these changes in self-reported health and disease prevalence in the adult population since 2007 may, at least in part, be due to a methodological change in the HCIC technology. In 2007, data was collected via telephone by a live interviewer; and, 2013 data was collected using an online self-completed questionnaire. The change to the newer technology, where subjects answered questions alone, as opposed to participation in a live conversation with a surveyor, may, we hypothesize, have reduced the degree of social desirability bias (12), with resulting greater veracity in the 2013-2014 survey responses, compared to the 2007 responses.

If this is the case, then the 2013-2014 results may be comparatively more accurate; and, the 2007 results may have underestimated true prevalence. This possibility is, in fact, supported by recent comparative measures of chronic disease prevalence. For example, the Centre for Chronic Disease Prevention and Control, of the Public Health Agency of Canada, reported that 60 percent of Canadian adults older than 20 have at least one chronic disease; and, the rate is increasing at 14 percent per year (13). This dilemma may be more

certainly resolved as we acquire more online-derived data in future HCIC surveys.

Overall, it is hoped these survey results may stimulate interventions to ameliorate key issues and grasp opportunities identified. Such next steps might include: further identification of the determinants, and solutions, for patient non-adherence with proven therapies; determining specifics of what care patients and non-professional caregivers can, and cannot, afford; and, what other social, familial, business or life choices may take priority over health care choices.

Things are continuing to change in health care. Questions and challenges remain.

Things can be better!

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Data Access

Health Care in Canada raw data are overseen by McGill University, Montreal, QC. HCIC data can be accessed via request to: info@hcic-sssc.com or hcic@mcgill.ca

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About the Authors

Sara Ahmed, PhD, is associate professor at the School of Physical and Occupational Therapy, Faculty of Medicine, McGill University, the McGill University Health Center's Division of Clinical Epidemiology, Clinical and Health Informatics; and, the Centre de recherche interdisciplinaire en réadaptation, Montreal, QC.

Amédé Gogovor, MSc, DVM, PhD candidate, Faculty of Medicine, McGill University, Montreal, QC.

Lucas Marshall, B Journ, is a senior research consultant and associate vice president, POLLARA Strategic Insights, Toronto, ON.

Wendy Morton, BA, is associate director, Policy and Communications, Merck Canada Inc., Montreal, QC.

Jill Norman, MScN, is special projects manager, New Service Offerings, Service Canada, Ottawa, ON.

Joanna Nemis-White, BSc, is principal, Strive Health Management Consulting Inc., Halifax, NS.

Terrence Montague, MD, is principal, CareNet Health Management Consulting Ltd., Edmonton, AB.