

OLDER WOMEN'S HEALTH REPORT

Aging is an important women's health issue. Canada's aging population is presenting unique challenges to the health system on multiple fronts. Women comprise the majority of the older population and have different patterns of illness and health needs than men. In 2005, 13% of the Canadian population was aged 65 or older, and this number is projected to increase to more than 25% by 2056. Older adults have a high burden of chronic disease and multiple chronic conditions requiring a patient-centred (rather than a disease-specific) approach to their care. Both social and biological factors result in important differences in the health and the health care needs of older women and men. Older women are more likely to have a greater burden of illness including multiple chronic conditions, more functional limitations, and a higher prevalence of disability than older men. Therefore, the mismatch between the way health and supportive care services are organized and the needs of older adults disproportionately impacts women.



Women in Canada have outlived men, though the difference in life expectancy between men and women is narrowing. At the age of 65, the life expectancy of a woman is more than 21 years while that for a man is three years less at 18 years. Not surprisingly, there are more women than men among our older adults, particularly among the oldest age groups. Today's generation of older women grew up in very different circumstances and had fewer opportunities than women growing up today. Currently, older women tend to have fewer financial resources, less education, fewer years experience in the workforce, and less experience managing family finances compared to older men. Accordingly, today's older women may be less able to pay for supportive care and to access health services that are not publicly funded. Older women are more likely to live alone, and are more likely to be caregivers than men. As a result of these and other factors, older women are more likely to require formal home care and long-term care services.

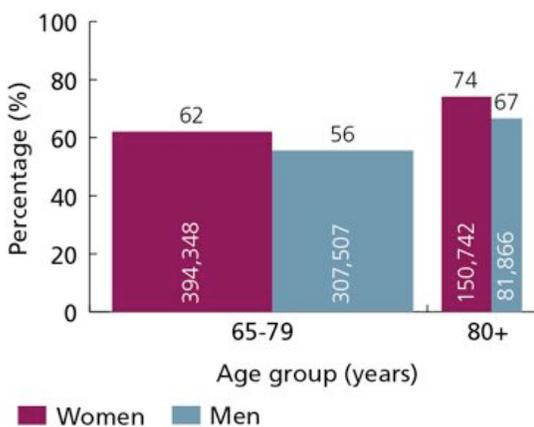
The current health system was developed to meet acute care needs—not to provide coordinated patient-centred care for chronic conditions—and is ill-prepared to meet the growing demand of the aging population. Health and community services tend to be fragmented and require integration and coordination to maximize effectiveness. Many different health care professionals are needed to provide effective care to older adults, including primary and specialty physicians, nurses, physical therapists, social workers, and personal care workers. The current primary care delivery system often has challenges in meeting the needs of chronically ill older patients. Furthermore, many health care providers have little training in the care of older adults. Ontario has only a handful of geriatricians, physicians who specialize in the care of frail older individuals. Accordingly, we will need to explore alternate models of care to meet the pending health care challenge of caring for this vulnerable group of individuals.

Aging is an issue that affects all of us, whether caring for loved ones or through our own personal experiences. Fortunately, there is much that can be done to help older adults remain active and independent as they age. There is a growing body of evidence for effective models of care for older adults with chronic illness, both to reduce risk and improve outcomes for those with chronic conditions. Performance measurement and reporting can play an important role in guiding and evaluating improvement efforts. To optimize outcomes, interventions need to be gender sensitive and specifically address the needs of

those who are socioeconomically disadvantaged. In this report we provide evidence on the access, quality and outcomes of care for older women and men in Ontario and their health status, and how this varies by income and geography. In doing so, we identify multiple opportunities for improvement. Our findings can be used to inform priority setting, target interventions, and provide a baseline from which to monitor progress.

In this report, the **burden of illness** among of Ontario's older women and men is profiled including: chronic disease, chronic disease risk factors and health and functional status. The chapter also includes indicators of **chronic disease management**, including measures of specialized physician care and services, as well as health outcomes. The final section takes a closer look at **settings of care of older adults**, providing information on those being provided with homecare services and the important group who reside in the long-term care setting.

Exhibit 1 | Percentage and number of community-dwelling adults aged 65+ who reported having 2 or more chronic conditions, by sex and age group, in Ontario, 2005



DATA SOURCE: Canadian Community Health Survey (CCHS), 2005 (Cycle 3.1)

NOTE: The width of each bar reflects the relative proportion of the older community-dwelling population (aged 65+) represented by that bar (based on the indicator's denominator)



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KEY FINDINGS

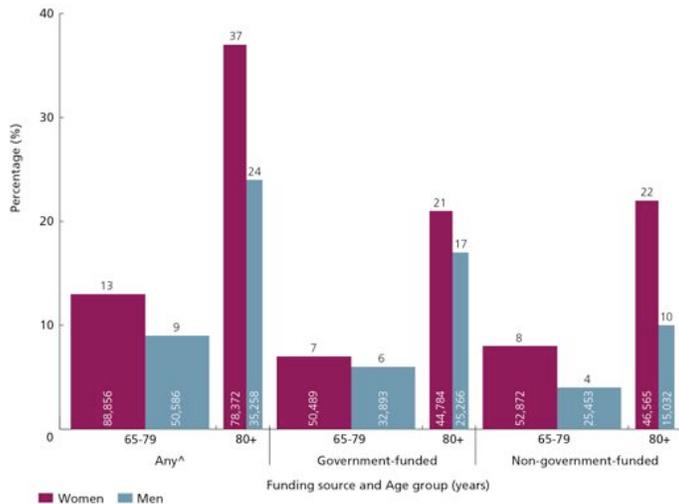
Women are disproportionately represented in the older population, particularly among those who reside in long-term care and have unique needs.

The majority of older people are women. The percentage of women is particularly high among those who are of advanced age and living in long-term care.

Older women have unique health needs. In part, this is based on the fact that older women are more likely than men to have multiple chronic conditions (65% versus 58%). The total number of women aged 80 and older reporting 2 or more chronic conditions is twice as high as the number of older men (**Exhibit 1**). Low socioeconomic status is an important additional risk factor for chronic conditions and is associated with worse outcomes for these conditions. Older women are much more likely to have low incomes than older men. In Ontario, an estimated 288,576 women and 185,806 men aged 65 and older are living in lower-income households (**Exhibit 2**).

Cancer is increasingly recognized as a chronic condition and cancer rates increase with age. Colorectal and lung cancer occur in both men and women but traditionally been perceived as a more important problem for men. Gender differences in lung cancer incidence have narrowed, due in part to increased uptake of smoking among women. In addition, there is an increased risk of cancer among women who smoke compared to men who smoke. Further, because older women outnumber older men, the number of women who experience these types of cancer is now close to or greater than the number of men. Cancer, and in particular those that have not traditionally been associated with older women, are important conditions for older women.

Exhibit 3 | Percentage and number of adults aged 65+ who reported receiving home care services in the past year, by sex, age group, and funding source, in Ontario, 2007-08

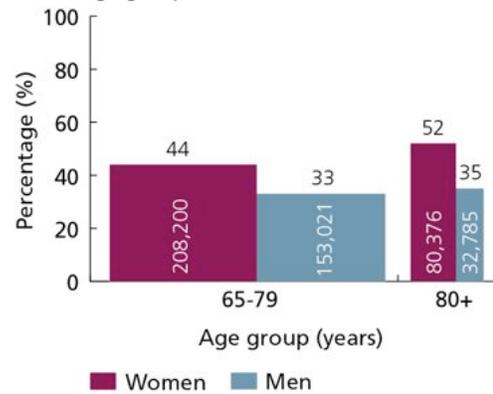


DATA SOURCE: Canadian Community Health Survey (CCHS), 2007-08

^includes both government- and non-government-funded home care services

NOTE: The width of each bar reflects the relative proportion of the older community-dwelling population (aged 65+) represented by that bar (based on the indicator's denominator)

Exhibit 2 | Percentage and number of community-dwelling adults aged 65+ who reported having lower annual household income, by sex and age group, in Ontario, 2005



DATA SOURCE: Canadian Community Health Survey (CCHS), 2005 (Cycle 3.1)

NOTE: The width of each bar reflects the relative proportion of the older community-dwelling population (aged 65+) represented by that bar (based on the indicator's denominator)

There is greater use of home care services by older women, both in terms of the rate and the total number of women using the services (**Exhibit 3**). This may reflect the complexity that results from having multiple chronic medical conditions. Having multiple chronic conditions may also predispose women to functional impairments that threaten their independence. This need for formal caregiving may relate to older women being more likely to live alone and to have less access to informal caregiving support than men. Older women's increased likelihood of lower socioeconomic status may limit or prohibit hiring private caregiving. Even though more older women report that they used home care services than older men, women are also more likely to report unmet need for these services.

Most older adults report health behaviours that increase their risk for developing chronic conditions or lead to worse health outcomes among those with existing conditions.

An increased focus on prevention, both primary and secondary, is required if we are to improve quality of life for older adults. For those without chronic conditions, it is important to prevent the development of these conditions (primary prevention). For others who already have one or more chronic conditions, the goal should be to prevent these conditions from getting worse (secondary prevention) and to improve quality of life.

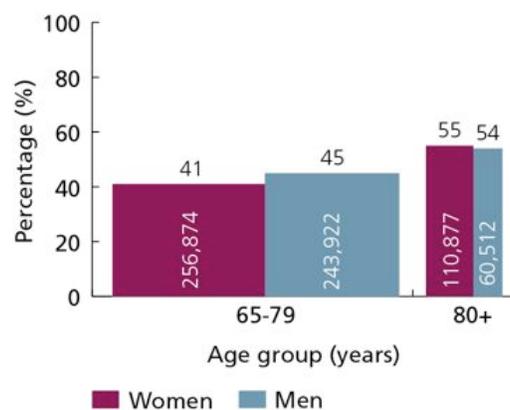
Being physically active, having a diet with adequate fruit and vegetable intake, and not smoking are 3 behaviours that people can adopt to modify, maintain, and improve their health. We found that more than half of all older adults reported being inactive (55%). Older women were more likely to be physically inactive than older men (60% versus 48%). Both women and men reported a diet that was inadequate in fruits and vegetables and nearly one in 10 older adults were smokers. Older women living in the lowest-income households were more likely to be physically inactive, report having inadequate fruit and vegetable intake or being a current smoker compared to wealthier women. Inadequate physical activity and poor diet lead to being overweight or obese which is far too common among older women and men.

KEY FINDINGS | continued

Although there are many changes individuals can make to improve their health, less than half of older adults (45%) reported that they took steps to improve their health in the past year. When steps were taken to improve health, the most common change reported was an increase in physical activity (41%). Women and men were equally likely to report making such a change. Among both women and men, the proportion that made that change decreased with age.

Maintaining good medical health also requires optimizing oral health. Good oral health is a prerequisite for good nutrition and poor oral health is associated with an increased risk of a number of chronic conditions. Close to half of older adults (45%) did not visit a dentist in the past 12 months. This percentage rose in the older age group to more than half (55% of women and 54% of men aged 80 and older) (**Exhibit 4**). This is particularly important because dental services are not funded within our health care system. Accordingly, access can be related to socioeconomic status.

Exhibit 4 | Percentage and number of community-dwelling adults aged 65+ who did not visit a dentist in the past 12 months, by sex and age group, in Ontario, 2005



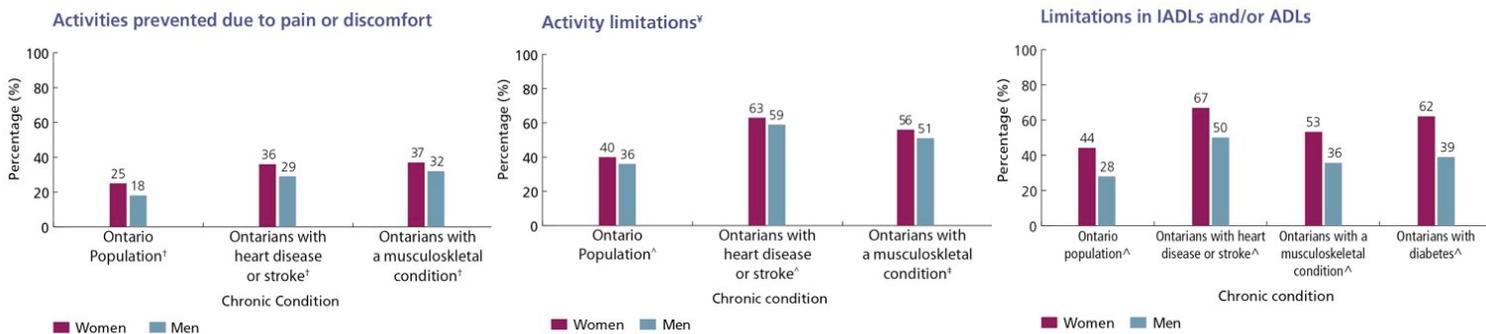
DATA SOURCE: Canadian Community Health Survey (CCHS), 2005 (Cycle 3.1)
NOTE: The width of each bar reflects the relative proportion of the older community-dwelling population (aged 65+) represented by that bar (based on the indicator's denominator)

Older women were more likely than men to report disability and chronic pain. Older women were more likely to have limitations in their instrumental activities of daily living (IADLs) or in their activities of daily living (ADLs) relative to older men. The percentage of adults with functional limitations increased steadily with age. Among those aged 80 and older, nearly two-thirds of women and one-half of men reported IADL and/or ADL limitations. Given that women are disproportionately represented in the older population, this translates into nearly twice as many older women with an IADL and/or ADL limitation as older men (370,123 women versus 189,233 men). Functional status is closely connected to chronic medical conditions and ultimately to the ability to live independently. Through prevention and effective chronic disease management, we may prolong the time that older women and men can live in an independent manner if they wish to remain in their homes. Maintaining functional independence is particularly important for older women who may be living alone. Loss of functional independence combined with less access to financial resources may mean that they may require an earlier move to long-term care.

Women were more likely to have their activities limited by pain than men (26% of women and 18% of men). Low-income women, women aged 80 and older, and those with chronic conditions were even more likely to report that their activities were limited by pain than their counterparts. More than 1 in 3 low-income women reported that their activities were limited by pain. In addition, more than 1 in 3 women who reported having a musculoskeletal condition also reported that their activities were limited by pain (**Exhibit 5**). This is consistent with other reports that suggest women are more likely than men to experience painful conditions such as arthritis and are less likely to receive adequate pain control. Restrictions in functioning due to pain are important to identify because pain can be managed and functioning restored.

In home and long-term care settings, many people experience a decline in IADLs/ADLs or cognitive functioning that could be potentially prevented or slowed. Maintaining this function and good cognitive status is important to quality of life at all life stages. Thus, a focus on function and cognitive status is needed in all care settings.

Exhibit 5 | Percentage of community-dwelling adults aged 65+ who reported functional limitations, by sex and chronic condition, in Ontario



DATA SOURCES: [^]Canadian Community Health Survey (CCHS), 2005 (Cycle 3.1); [‡]Canadian Community Health Survey (CCHS), 2005 (Cycle 3.1) and 2007; [†]Canadian Community Health Survey (CCHS), 2000/01 (Cycle 1.1)

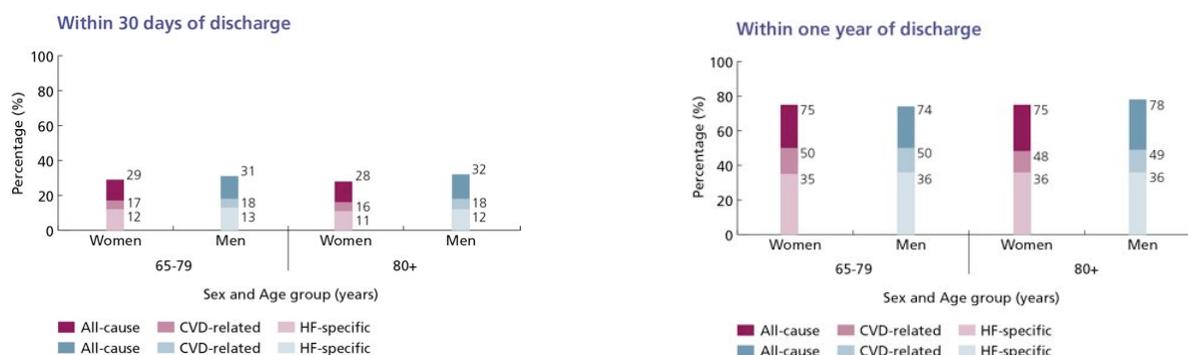
^{*}Activities at home, school or work have been limited due to a long-term physical condition, mental condition, or health problem

KEY FINDINGS | continued

Much of the observed disability among older adults is due to chronic conditions. Where possible, we need to screen for chronic conditions and their risk factors so that preventive strategies can be initiated and these conditions can be better managed. Diagnosis and treatment for selected conditions decreased with increasing age for both women and men. Rates of coronary angiography referral after an AMI were lower in women than men. Bone mineral density (BMD) testing rates were lower in men (among older adults who had a low-trauma fracture, 21% of women versus 16% of men received a BMD test within 1 year of their fracture). Medical oncology referral rates were similar in women and men in both age groups. There is opportunity to improve chronic disease management through patient-centred interdisciplinary models of care and thus improve health and functional status, leading to improved quality of life. By identifying and treating conditions like osteoporosis, we can hopefully prevent fractures and some of the decline that is associated with these conditions.

There were high rates of potentially avoidable hospital admissions for common chronic conditions (heart failure, COPD, diabetes) among older women and men. These rates increased with age and were highest among those aged 80 and older. We documented high rates of admission for ambulatory care sensitive conditions that increased with age, with higher rates in men compared to women in both age groups. Nevertheless, given the predominance of women in the older age groups, a similar number of women and men were hospitalized for these conditions. This situation may relate to a current system of care where management of chronic conditions in ambulatory settings may be suboptimal. Care coordination is a big concern in the current health system and fragmentation between different providers and different settings can result in poor patient outcomes. For example, better care coordination could help reduce avoidable emergency department (ED) visits and hospital readmissions among older adults with heart failure (**Exhibit 6**). Optimal care for chronic conditions often benefits from the input of inter-professional teams with formal mechanisms for communication and care coordination. Opportunities to work across disciplines and across the primary care, home care, acute care, and long-term care sectors may lead to improved outcomes for older people and fewer hospitalizations for conditions that should be preventable.

Exhibit 6 | Percentage of heart failure patients aged 65+ who were seen in an emergency department, by sex and reason for visit, in Ontario, 2005/06



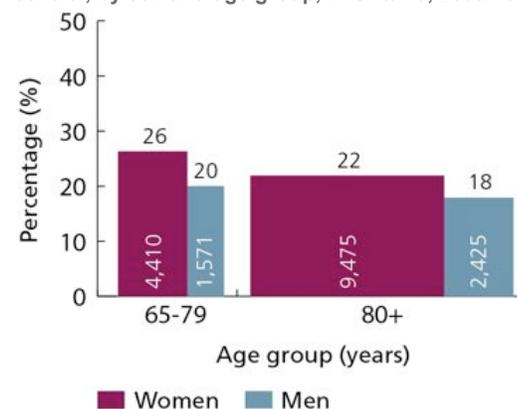
DATA SOURCE: Canadian Institute for Health Information Discharge Abstract Database (CIHI-DAD); National Ambulatory Care Reporting System (NACRS)

NOTE: HF specific visits are part of CVD-related visits. All-cause visits represent all ED visits including CVD-related visits

Among those receiving home care, there are opportunities to improve care for both women and men. An important goal of home care is to optimize independence and to decrease the rate of both physical and cognitive decline. Using the crude estimates, women were more likely than men to experience inadequate pain control (23% versus 19% of home care visits, respectively) (**Exhibit 7**), depressed mood (9.0% versus 7.9% of assessments, respectively) and injuries (14% versus, 9% of assessments, respectively) than men; while, men were more likely than women to experience a new ADL impairment or one that failed to improve (53% versus 43% of assessments, respectively) or cognitive decline (51% of women versus 61% of men).

These differences were eliminated with risk adjustment, indicating that women and men receiving home care differ in health status, but experience similar outcomes when these differences are taken into account. Therefore, gender-sensitive interventions may be needed to improve health outcomes in this setting. In all cases, the number of assessments showing these outcomes among women was far greater than the number among men, especially among those aged 80 and older.

Exhibit 6 | Percentage and number of assessments among long-stay home care clients aged 65 and older with pain where the client reported inadequate pain control, by sex and age group, in Ontario, 2009/10



DATA SOURCE: Home Care Reporting System (HCRS)

NOTE: The width of each bar reflects the relative proportion of the long-stay home care assessments (among clients aged 65+) represented by that bar (based on the indicator's denominator)

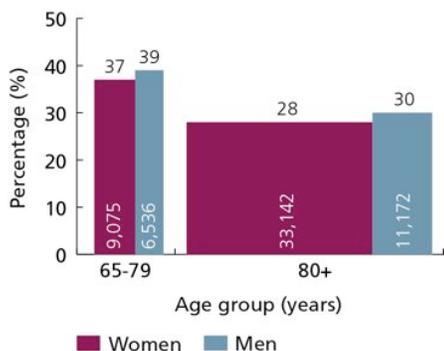
KEY FINDINGS | continued

Among residents of long-term care, there were few gender differences on reported quality indicators after risk-adjustment. However, there were many opportunities to improve care for both women and men. Emergency department (ED) transfers from long-term care were common. The rate of potentially preventable ED visits was higher for men relative to women (27 visits per 100 men, 19 per 100 women) (**Exhibit 8**). However, given that more women than men reside in long-term care nearly twice as many women had a potentially preventable ED visit (8,863 women, 4,767 men). Improved chronic disease management in long-term care could help prevent some of these visits. Rates of transfer to the ED or hospitalization for falls were similar between women and men (14 falls per 100 women, 13 per 100 men) but the number of hospital visits among women was more than double the number of visits among men (6,498 among women, 2,254 among men).

Antipsychotic use without a diagnosis of psychosis was recorded on almost a 1/3 of assessments among long-term care residents aged 65 and older (30% among women and 33% among men). Given that more women reside in long-term care, there were more than twice as many assessments showing antipsychotic use without a diagnosis of psychosis among women than men (42,217 women, 17,708 men) (**Exhibit 9**). Use of anti-anxiety or hypnotic drugs was recorded on almost a quarter of assessments among older long-term care residents. Women were slightly more likely to be prescribed one of these medications than men (24% versus 21%). Given the predominance of older women in long-term care, there were 3 times as many women as men that recorded use of these medications (34,261 versus 11,499 assessments, respectively).

In Ontario, nearly 1 in 5 assessments among long-term care residents showed that the resident was in daily physical restraints (**Exhibit 10**). Physical restraints have been linked to serious problems including an increased risk of falls, behavioural problems, and even death. The fact that these rates continue to be so high in Ontario is cause for concern and points to the need for improved strategies to minimize (and hopefully eliminate) their use in long-term care.

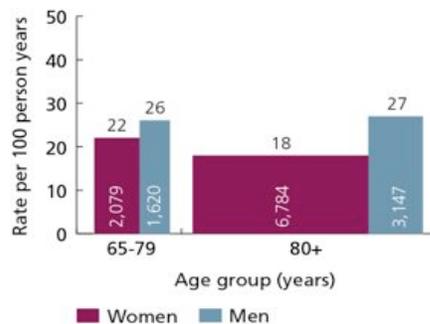
Exhibit 9 | Percentage and number of assessments among long-term care residents aged 65+ where the resident was on antipsychotics without a diagnosis of psychosis, by sex and age group, in Ontario, 2009/10



DATA SOURCE (for 9 and 10): Continuing Care Reporting System (CCRS)

NOTE (for 9 and 10): The width of each bar reflects the relative proportion of the long-term care resident assessments (among those aged 65+) represented by that bar (based on the indicator's

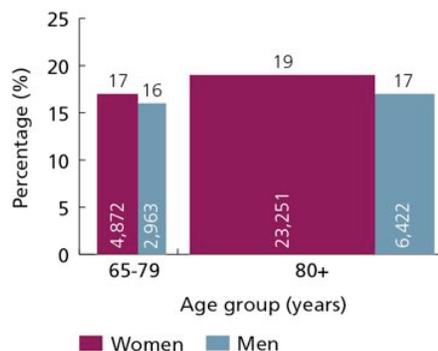
Exhibit 8 | Number of potentially preventable emergency department visits for every 100 long-term care residents aged 65+ per year and the total number of ED visits, by sex & age group, in Ontario, 2009/10



DATA SOURCES: Ontario Health Insurance Plan (OHIP); National Ambulatory Care Reporting System (NACRS); Canadian Institute for Health Information Discharge Abstract Database (CIHI-DAD); Registered Persons Database (RPDB)

NOTE: The width of each bar reflects the relative proportion of the long-term care residents (aged 65+) represented by that bar (based on the indicator's denominator)

Exhibit 10 | Percentage and number of assessments among long-term care residents aged 65+ where the resident was in daily physical restraints, by sex and age group, in Ontario, 2009/10



We need to prepare the diverse health care workforce to meet the needs of the aging population. Many different health care professionals are needed to provide effective care to older adults including geriatricians, primary and specialty physicians, nurses, physical therapists, social workers, and personal care workers. Many health care providers have little training in the care of older adults. Overall, there were only 5 geriatricians per 100,000 adults aged 65 and older in Ontario. This rate varied markedly across LHINs, with some having only 1 per 100,000 older adults. New models of interdisciplinary care will need to be developed and implemented that can work to maximize this valuable, but limited, resource. These include shared care models where geriatricians work in family health teams, with teams in the community as well as telemedicine, providing access to consultations and specialty care. Further specialized training should be provided in the care of older people to family physicians, nurses, pharmacists, and other health care workers to improve skills across disciplines.

KEY MESSAGES

In this chapter we paint a picture of the health needs of older women and men, their use of health services, and the quality of care received and how this varies by age, socioeconomic status and where one lives. Older women and men experience a high burden of illness, may receive suboptimal care for chronic conditions, and receive care from multiple settings including home and long-term care. Older women comprise the majority of the older population and have unique needs. Thus, improving the care of older adults, and reducing their burden of illness will require special attention to the needs of older women. We identified a number of opportunities for improvement. The seven strategies below can help us accelerate progress.

Design health care delivery systems that account for the different health and social needs of older women and men, as well as their different overall numbers in the population.

- Older women and men have different health, support, and social needs. Those differences need to be considered in care planning and policy development. This applies in the community and long-term care settings.
- Routine reporting of sex-disaggregated rates and total numbers would provide key information to form the basis for planning for the older population that has a different sex distribution than younger age groups. Both the rates and total numbers need to be reported when describing the health needs of older women and men. Even when the rates are similar between women and men, the predominance of women in the older population means that more women overall may be affected. The net result is that, in almost all cases, there are a greater number of women than men who require specific clinical care and health services.

Effective prevention and health promotion strategies to optimize health outcomes among older women need to be implemented as it is better to prevent than treat chronic conditions.

- Prevention should begin when people are young and continue across the life course to improve population health and reduce the burden of chronic disease. A focus on prevention includes lifestyle changes such as increased physical activity, optimal nutritional intake, and smoking cessation—all of which can help older adults maintain their independence by preventing or slowing functional decline and preventing chronic conditions and their complications. Physical inactivity is more common in older women than in older men. Programs to promote physical activity need to develop activities that target the particular needs of older women.

- The value of both community-based and clinical approaches to prevention in different care settings has been well-documented. Coordination of both approaches is most likely to result in measurable changes in the health of older adults.

We need to address socioeconomic status as a barrier to good health across the life course and among older adults.

- The social determinants of health result in an increased burden of illness by increasing the risk of developing chronic conditions, worsening health and functional status, and creating barriers to healthy lifestyles. Therefore, we need to foster healthy living and working conditions, educational opportunities and specifically address barriers low-income individuals face in making healthy lifestyle changes. Understanding and embracing the contribution of the broader determinants of health is an important foundational concept in providing care and services.
- Access to preventive dental care is important for maintaining health and nutrition. Dental care is an example of a service that is not universally accessible in our existing health care system. Those without private insurance or those with lower socioeconomic status may not be able to afford this service. Poor dentition may impact health and lead to reduced quality of life.

A focus on improving quality of life and maintaining independence is a priority for older women and men.

- Strategies are needed that focus on improving quality of life and functional status as disability and frailty are not the inevitable consequences of aging. For those with chronic conditions, common goals are to control symptoms, optimize functioning, and prevent decline. Evaluating health services for older people and determining the value of services should include an assessment of quality of life, functional outcomes, and patient/family satisfaction.
- Integrating population-based and clinical approaches can help reduce the risk of chronic disease and disability and optimize quality of life.

Develop new integrated clinical care models to address the complexity of needs and heterogeneity of older adults

- We need to rethink our current models of clinical care so that we can better provide care to older women and men who have multiple chronic conditions and functional limitations. Goal setting and care planning should be driven from the perspective of the patient and their individualized priorities. For older adults with longstanding chronic conditions, cure is often not possible and therefore not always the goal.

KEY MESSAGES | continued

- Clinical judgment—guided by experience and knowledge of age-related physiological change and the complex interaction of multiple diseases and medications—should temper the routine application of practice guidelines. Strategies need to be developed to support older adults in their decision-making. The appropriate application of available treatments should incorporate many decision-making variables including available evidence for efficacy and safety in the context of factors specific to patient at hand and patient preference. Every person, regardless of age or sex, has the right to be treated as an autonomous individual with his or her own unique values, health concepts, and ways of making decisions in the context of factors specific to the individual patient and patient preference.
- Age should not be a barrier to good care. Negative attitudes toward seniors in our society and health care system may be overt or subtle. Unrecognized clinician bias may result in a nihilistic perspective that denies the older patient potentially valuable therapy. When clinical circumstances are suitable, medical therapies and interventions of proven efficacy should not be denied on the basis of biologic age alone.
- Managing multiple coexisting chronic conditions demands innovative approaches to care that traditional models of care delivery were not designed to provide. Shared care models and integrated care teams that cross sector and organizational boundaries have been shown to improve health outcomes for seniors and achieve efficiencies in health service utilization. Inter-professional teamwork, as outlined in the Health Force Ontario, Inter-professional Care: Blueprint for Action, is the care delivery method of choice in caring for frail seniors.
- Strategies are required to reduce unnecessary emergency department visits through integration and coordination of services. Where possible, preventive measures should be instituted to manage conditions in the community or the long-term care setting before they become serious enough to require care in the emergency department or an acute care hospital. Health care resources need to target people in the ambulatory setting. Innovative models of care that are accessible to older women and men are required. Opportunities exist for the development of innovative models of care such as the Virtual Ward designed specifically to support vulnerable older adults.

Increase the number of health care providers specialized in geriatric care and improve the competencies of all health care providers who work with adults.

- We have very few geriatric medicine specialists or other health professionals skilled in taking care of the geriatric population in Ontario and in Canada. The health care needs of seniors are often complex and require the services of inter-professional care teams, but specialized geriatric health human resources in Ontario are in scarce supply. The aging demography of Ontario's population will require both an increase in the number of geriatric medicine specialists and care providers across the province, as well as enhanced skills and knowledge distributed across all health disciplines in order to provide quality care to older people.
- Older people require the service of all facets of our health care system. Core competencies in recognizing and managing geriatric syndromes and diseases in older people must be distributed across health care professions and across the system's continuum. Although models of specialized care are shown to be advantageous when caring for older people, it is not realistic—or necessarily desirable—for care of older people to be sequestered to special units or teams of care providers. Care providers across the system must share the responsibility of caring for older adults.

Build the evidence-base to optimize care for older adults and enhance data capacity and reporting to guide improvement.

- Clinical trials often have not included women, those of advanced age, or those who have multiple medical conditions or disabilities. Often clinical guidelines do not provide information on how to best care for older adults who have multiple chronic conditions. Guidelines on when to stop preventive medications such as cholesterol lowering drugs are not available. There is a need to prioritize research on the effectiveness of clinical management as well as models of care to improve care for older adults.
- Quality indicators, when reported, should be stratified by sex and age. Numbers of individuals affected as well as rates should also be routinely reported to capture need. There is a need for indicator development to reflect the complexity of care for older adults, and enhanced data capacity to better measure important domains of health and health care. Collection of patient reported outcomes can provide information on quality of life, functional status, and experiences with care. More detailed clinical data—as can be derived from electronic health records—can allow better assessment of appropriate care. Administrative data can be used to evaluate outcomes of drug treatment. Data on ethnicity would allow assessment of quality and outcomes of care among diverse populations.

STUDY

The indicators that we report include selected indicators presented in previous POWER Study chapters, as well as new indicators on home care and long-term care. Bringing together and synthesizing findings from across POWER Study chapters allows us to paint a picture of the health needs of older women so as to inform needed changes in practice and policy. While the indicators of home care and long-term care are regularly reported by Health Quality Ontario (HQO), we build on HQO reports by incorporating a gender and equity analysis (see the **POWER Study Framework**, chapter 2). This is important because women and men have different patterns of disease, disability and mortality. Women and men also have different social contexts and different experiences with health care which, together with differences in biology, contribute to observed gender differences in health. While these indicators provide a wealth of information, they are not comprehensive. Indicators do not exist for everything that is relevant to older women. Some key areas such as cognitive impairment, dementia, and informal caregiving are under developed.



The definition of old age is changing as life expectancy increases. Accordingly, we provide important information on those who are aged 80 and older—the vast majority of whom are women. Our work is novel in that we report rates and total numbers for each of our indicators. Even when rates of an event are similar between women and men (or in some cases higher in men than in women), the predominance of women in the older population means that more women than men in the population will experience the event. In order to emphasize this important point, we use variable column width graphs which show traditional rates, but also illustrate the differences in the total numbers by varying the widths of the bars.

Data from several sources were used to produce this report. These include: Statistics Canada's 2006 Census; the Canadian Community Health Survey (CCHS), 2000/01 (Cycle 1.1), 2005 (Cycle 3.1) and 2007-08; Ontario Health Insurance Plan (OHIP) data; the Canadian Institute for Health Information Discharge Abstract Database (CIHI-DAD); the National Ambulatory Care Reporting System (NACRS); the Institute for Clinical Evaluative Sciences (ICES) Physician Database (IPDB); the Ontario Diabetes Database (ODD); the Ontario Cancer Registry (OCR); the Cardiac Care Network (CCN); the Ontario Physician Human Resources Data Centre, Active Physician Registry; IntelliHEALTH; the Home Care Reporting System (HCRS); and the Continuing Care Reporting System (CCRS). The CCHS includes only the community-dwelling population; therefore, indicators based on CCHS data exclude older adults in long-term care homes. For more detail on indicators originally reported in previous POWER Study chapters, please see the Appendix, '**How the Research Was Done**' from the original chapter. See **Appendix 2** of the original report for more detail on newly reported indicators.

Data were first stratified by sex and then further stratified by age, income and Local Health Integration Network (LHIN), as allowed by data availability and sample size. Age- or risk-adjustment was done where appropriate. If not otherwise stated, reported differences are statistically significant. Appendix 2 provides a more detailed description of research methods.

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