

Health Reports

Unmet home care needs in Canada

by Heather Gilmour

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Unmet home care needs in Canada

by Heather Gilmour

Abstract

Background: Unmet home care needs have been linked to poor health, increased use of other health services, admission to nursing homes and reduced emotional well-being.

Data and methods: Using data from the 2015/2016 Canadian Community Health Survey, this article describes home care use and unmet home care needs by type (i.e., home health care [HHC] and support services) in community-dwelling adults. Among the population with home care needs, the degree to which needs were met, partially met or unmet is presented, as well as information about the barriers to obtaining home care services and the places services were sought. Multivariate analysis was used to examine factors associated with unmet home care needs by type, while controlling for predisposing, enabling and needs-related factors.

Results: In 2015/2016, just over one-third (35.4%) of people with home care needs, an estimated 433,000 people, did not have those needs met. This was more prevalent among those with support needs than those with HHC needs. Availability of services was most often cited as a barrier to obtaining home care services, particularly for those with an unmet need for HHC services. Age group, household type, long-term care insurance and health status factors were associated with perceiving an unmet home care need, with few differences by type of unmet need.

Interpretation: The degree to which needs were met and the perceived barriers to obtaining home care services varied by type of unmet home care need. The results indicate proportionally higher unmet needs for home care services among adults aged 35 to 49. This suggests a possible service gap.

Keywords: cross-sectional study, health survey, socioeconomic status, home nursing

Home care encompasses a wide range of services delivered to individuals of all ages in their home rather than in a hospital or long-term care facility. Purposes of home care services include short-term care for recovery from surgery or acute illness, longer-term care for those who are disabled or experiencing limitations because of a chronic condition or aging, or care for those who are terminally ill. Unlike hospital and physician services, home care is not an insured service under the *Canada Health Act*. Therefore, the provinces and territories are not required to offer it to qualify for federal transfers for health care. However, all provinces and territories have home care programs that are an important component of the health care system. Variations in how expenditures are recorded and which services are included pose challenges to estimating overall costs. Two recent estimates of home care expenditures range from \$3.7 billion¹ to \$5.9 billion.²

The increasing population of older adults and those with chronic conditions may result in greater demand for home care services.³ Services delivered in the home may help meet the desire of individuals to remain at home and reduce costs associated with more expensive institutional options.³ As a result, the extent to which home care needs are being met is relevant to the well-being of both the individual and the health care system. Unmet home care needs have been linked to negative consequences such as poorer health and increased use of other health services⁴, admission to nursing homes^{5,6}, and reduced emotional well-being.^{7,8}

Services provided by health care providers, personal service workers or volunteer agencies are considered home care, while those provided by friends, family or neighbours are considered informal care or caregiving. This study focuses on home care services, which can be further grouped into home health care (HHC) services and support services.^{9,10} Health professionals

typically deliver HHC services including nursing care, other health care services such as physiotherapy, occupational or speech therapy, or nutritional counselling, and help with medical equipment or supplies. HHC services are usually delivered through publicly funded home care programs, but they can also be purchased privately. Support services are provided by public home care programs, private companies and volunteer agencies. They help people with daily tasks such as bathing, meal preparation, housekeeping and transportation and may be covered by a mix of public and private sources. Understanding the differences in factors associated with unmet home care needs by type is relevant to program planning and delivery.

Using data from the 2015/2016 Canadian Community Health Survey (CCHS), this article examines the prevalence of home care use and unmet home care needs among individuals aged 18 or older living in the community. Unmet needs were examined by type (i.e., HHC and support). For those with home care needs, the degree to which needs were met, partially met or unmet is presented, in addition to information about the barriers to obtaining home care services and the places services were sought. Multivariate analysis was used to examine factors associated with unmet home care needs by type among the population with home care needs.

Data and methods

Canadian Community Health Survey (CCHS) 2015/2016

The cross-sectional CCHS collects information related to health status, health care utilization and health determinants for the Canadian population aged 12 and older. Excluded from the survey's coverage are: people living on reserves and Aboriginal settlements in the provinces; full-time members of the Canadian

Forces; youth aged 12 to 17 living in foster homes; the institutionalized population; and people living in the Quebec health regions of Nunavik and Terres-Criées-de-la-Baie-James. These exclusions represent less than 3% of the target population. CCHS data were collected from January 2015 through December 2016. The overall response rate was 59.5%, for a final sample of 110,095, representing 30.6 million Canadians.

What is already known on this subject?

- Unmet home care needs have been linked to negative health consequences and increased health care costs.
- Little is known about differences in factors associated with unmet home health care (HHC) service needs and unmet support service needs.

What does this study add?

- An estimated 1.2 million Canadians aged 18 or older living in the community had home care needs in the previous year. These needs were met for 65%, partially met for more than one-quarter (26%) and unmet for 1 in 10 (10%).
- Those with a need for support services were more likely to have those needs unmet or partially unmet than those with an HHC need.
- Availability issues affected the ability to obtain home care services, more so for HHC services than support services (42% versus 25%). Most frequently, services were sought from government home care programs.
- Although HHC and support services differ in the nature of care provided, the multivariate analyses showed few differences in the correlates of having an unmet need for either type of home care.

Analytical sample

The survey questions asked about the receipt of home care by the respondent or by anyone else in their household. However, information on the individual characteristics of the latter was not collected. As a result, this analysis focuses only on cases in which the respondent answered about their own home care and unmet needs.

Home care questions were asked of respondents aged 18 or older. This yielded an analytical sample of 98,960. Proxy responses comprised 2.4% of the analytical sample (2,361). A home care need was identified (see definitions) for 6,256 respondents—4,246 had met needs, 1,387 had unmet needs and 623 had partially met needs. An HHC need was identified by 3,425 respondents—2,802 had met HHC needs, 456 had unmet HHC needs and 167 had partially met HHC needs. A support need was identified by 4,098 respondents—2,485 had met support needs, 1,237 had unmet support needs and 376 had partially met support needs. The HHC need and support need groups were not mutually exclusive: 1,288 respondents had both HHC and support needs and 247 respondents had both an unmet HHC need and an unmet support need.

Definitions

Receipt of home care

Home care refers to services received in the home because of a health condition or a limitation in daily activities and does not include help from family, friends or neighbours. Respondents were asked whether they or other household members had received the following types of care in the past 12 months:

- nursing care (e.g., dressing changes, preparing medications, V.O.N. visits)
- other health care services (e.g., physiotherapy, occupational or speech therapy, nutrition counselling)
- medical equipment or supplies (e.g., wheelchair, pads for incontinence, help with using a ventilator or oxygen equipment)

- personal or home support (such as bathing, housekeeping, meal preparation)
- other services (such as transportation, meals-on-wheels).

For this study, nursing care, other health care services and medical equipment were grouped together as home health care (HHC) services. Personal or home support and other services were grouped into support services.

Unmet home care need

Respondents were asked if, during the past 12 months, there was ever a time when they or anyone in their household felt that home care services were needed but were not received. If they indicated this was the case for themselves only, or for themselves and someone else in the household, they were considered to have perceived unmet home care needs. Additionally, two non-mutually exclusive groups were created—unmet HHC needs and unmet support needs. If more than one person in the household had an unmet need, the respondent was instructed to answer only about themselves.

Home care need status

The population with a home care need includes individuals who received home care and/or identified an unmet home care need. Those who received home care services and did not report an unmet home care need were considered to have “met needs.” Among those who perceived an unmet need, need status was identified as “unmet needs” if no home care services were received and as “partially met needs” if home care services were received.

Correlates of unmet home care needs

Andersen’s Behavioral Model of Health Service Use¹¹ was designed to predict service use but has been applied by researchers to unmet needs.¹²⁻¹⁴ Correlates of unmet needs were placed in three categories. Predisposing characteristics are related to the tendency to use health care services. Enabling resources

refers to the availability of services and personnel and the knowledge and ability to access them. Needs-related factors, such as health status, influence the need for services.

Predisposing characteristics

Respondents provided information on sex, age and family relationships. Six age groups were defined: 18 to 34, 35 to 49, 50 to 64, 65 to 74, 75 to 84, and 85 or older.

Household type identifies family relationships within the household. It is based on the concept of economic family, which refers to a group of two or more people who live in the same dwelling and are related to each other by blood, marriage, common law or adoption.

Enabling resources

Several indicators of socioeconomic status (SES), as well as having a regular health care provider and long-term care insurance, represent enabling resources.

The highest level of household education was categorized as either: postsecondary graduation or secondary graduation or less.

Household income and main source of income were determined from one of three sources: tax records (36%), respondent-provided data (43%) and imputed data (20%).

To identify people of limited means, respondents were asked about their main source of income: wages and salaries; income from self-employment; dividends and interest (e.g., on bonds, savings); employment insurance; worker’s compensation; Canada or Quebec Pension Plan benefits; retirement pensions, superannuation and annuities; RRSP/RRIF; Old Age Security and Guaranteed Income Supplement; child tax benefit or family allowances; provincial or municipal social assistance or welfare; child support; alimony; other (e.g., rental income, scholarships); or none. Respondents who cited Old Age Security and Guaranteed Income Supplement or provincial/municipal social assistance or welfare were grouped and compared with those relying on other income sources.

Four household income ranges were defined: 0 to \$39,999; \$40,000 to \$59,999; \$60,000 to \$79,999; and \$80,000 or more.

Dwelling ownership was classified as owned by a member of the household (even if it is still being paid for) or rented (even if no cash rent is paid).

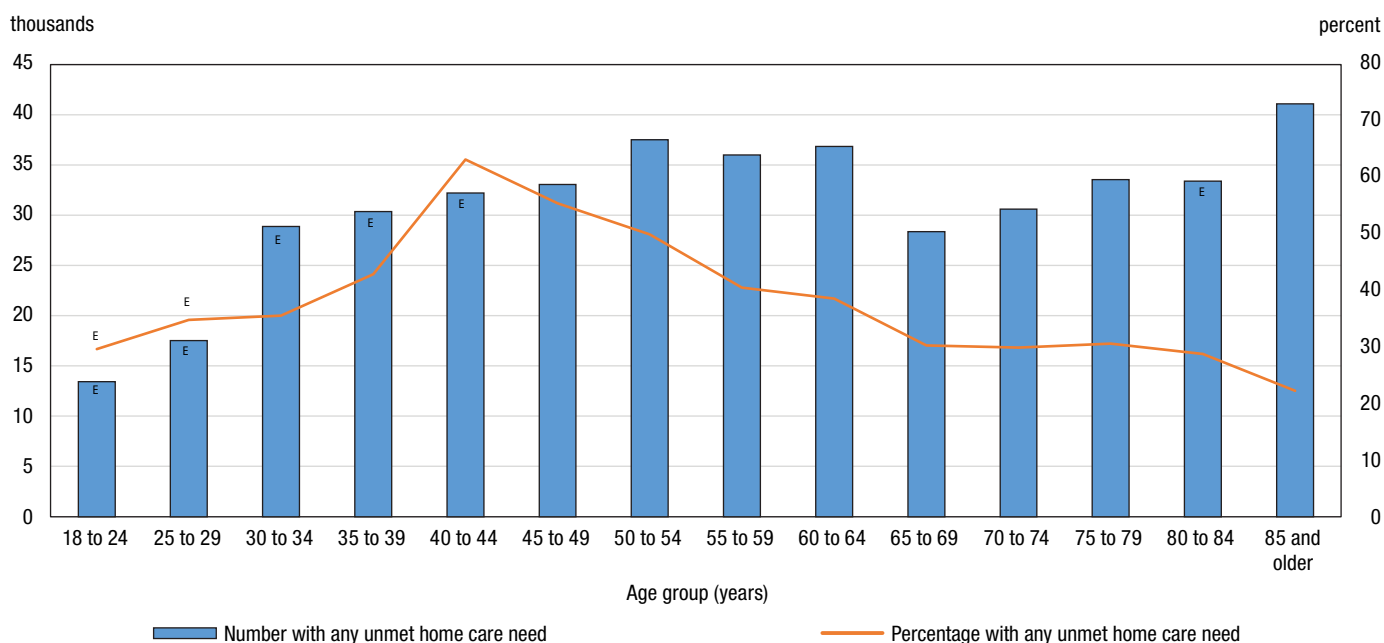
Whether respondents had a regular health care provider was determined with the question, “Do you have a regular health care provider? By this, we mean one health professional that you regularly see or talk to when you need care or advice for your health.”

Those who responded “yes” to the question “Do you have insurance that covers all or part of your long-term care costs, including home care?” were considered to have long-term care insurance. Of the sample, 16% responded “don’t know”; therefore, this was kept as a separate category in analysis.

Needs-related factors

Variables about disability, activity restriction or disease severity were not available. As a result, three variables were used as indicators of need: number of chronic conditions, self-perceived health and time spent in hospital in the past year.

Figure 1
Number and percentage with a perceived unmet home care need, by age group, household population aged 18 or older with a home care need in the past 12 months, Canada, 2015/2016



[†] use with caution

Source: 2015/2016 Canadian Community Health Survey.

Table 1

Prevalence of home care use and perceived unmet home care need in the past year, by type of unmet need and predisposing, enabling and needs-related characteristics, household population aged 18 or older, Canada, 2015/2016

Characteristic	Received home care services				Unmet need for any home care service				Unmet need for HHC services				Unmet need for support services			
	Number 000	%	95% confidence interval from to		Number 000	%	95% confidence interval from to		Number 000	%	95% confidence interval from to		Number 000	%	95% confidence interval from to	
Total	918.5	3.3	3.2	3.5	432.7	1.6	1.5	1.7	150.0	0.5	0.5	0.6	344.9	1.3	1.1	1.4
Predisposing characteristics																
Sex																
Men†	339.6	2.5	2.3	2.7	146.9	1.1	0.9	1.3	64.3	0.5	0.4	0.6	109.4	0.8	0.7	1.0
Women	579.0	4.2*	3.9	4.4	285.9	2.1*	1.9	2.3	85.7	0.6	0.5	0.7	235.5	1.7*	1.5	1.9
Age group																
18 to 34†	128.4	1.6	1.4	1.9	59.8	0.8	0.6	1.0	20.8 ^E	0.3	0.2	0.4	46.1 ^E	0.6 ^E	0.4	0.8
35 to 49	98.9	1.4	1.2	1.7	95.6	1.4*	1.2	1.7	33.1	0.5*	0.4	0.6	74.6	1.1*	0.9	1.3
50 to 64	179.7	2.5*	2.2	2.8	110.3	1.5*	1.3	1.8	43.8	0.6*	0.5	0.8	85.2	1.2*	1.0	1.4
65 to 74	156.1	4.7*	4.2	5.2	59.0	1.8*	1.5	2.0	18.4	0.5*	0.4	0.7	47.0	1.4*	1.2	1.7
75 to 84	188.9	12.2*	11.2	13.3	67.0	4.3*	3.6	5.2	18.7 ^E	1.2 ^{E*}	0.8	1.7	55.5	3.6*	2.9	4.5
85 or older	166.5	34.1*	31.4	36.9	41.1	8.5*	6.6	10.8	15.3 ^E	3.2 ^{E*}	1.8	5.6	36.5 ^E	7.5*	5.7	9.9
Household type																
Person living alone†	308.8	7.2	6.8	7.7	153.5	3.6	3.3	3.9	42.5	1.0	0.8	1.2	124.9	2.9	2.7	3.2
Couple alone	261.2	3.3*	3.0	3.5	92.7	1.2*	1.0	1.3	39.1	0.5*	0.4	0.6	67.9	0.9*	0.7	1.0
Parent(s) with child(ren) younger than 25	202.0	1.8*	1.6	2.0	120.0	1.1*	0.9	1.3	39.3	0.3*	0.3	0.5	93.2	0.8*	0.7	1.0
Parent(s) with child(ren) 25 or older	119.4	5.0*	4.2	5.9	46.7 ^E	2.0 ^{E*}	1.4	2.7	20.9 ^E	0.9 ^E	0.5	1.5	41.1 ^E	1.7 ^{E*}	1.2	2.4
Other	25.3 ^E	1.9 ^{E*}	1.4	2.7	18.2 ^E	1.4 ^{E*}	0.9	2.2	x	x	x	x	16.5 ^E	1.3 ^{E*}	0.8	2.0
Enabling resources																
Household education																
Postsecondary graduation	564.4	2.7*	2.5	2.9	269.3	1.3*	1.2	1.4	95.7	0.5*	0.4	0.5	206.4	1.0*	0.9	1.1
Secondary graduation or less†	309.8	5.7	5.3	6.2	130.9	2.4	2.1	2.7	38.0	0.7	0.6	0.9	111.1	2.1	1.8	2.4
Main source of household income																
Social assistance or Old Age Security and Guaranteed Income Supplement	124.3	9.5*	8.6	10.5	75.7	5.8*	5.0	6.7	23.7 ^E	1.8 ^{E*}	1.4	2.5	62.2	4.8*	4.1	5.6
Other†	687.7	2.9	2.7	3.0	321.7	1.3	1.2	1.5	114.4	0.5	0.4	0.6	254.3	1.1	1.0	1.2
Household income																
\$0 to \$39,999	400.4	6.7*	6.3	96.5	212.6	3.6*	3.2	3.9	64.9	1.1*	0.9	1.3	171.3	2.9*	2.6	3.2
\$40,000 to \$79,999	273.7	3.4*	3.1	97.6	120.6	1.5*	1.3	1.7	43.1	0.5*	0.4	0.7	96.5	1.2*	1.0	1.4
\$80,000 or more†	244.5	1.8	1.6	98.4	99.5	0.7	0.6	0.9	42.1	0.3	0.2	0.4	77.0	0.6	0.5	0.7
Dwelling ownership																
Own	601.0	3.0*	2.8	3.2	254.6	1.3*	1.1	1.4	87.3	0.4*	0.4	0.5	205.8	1.0*	0.9	1.2
Rent†	313.5	4.3	4.0	4.6	173.6	2.4	2.1	2.7	61.0	0.8	0.7	1.0	61.0	1.8	1.6	2.1
Regular health care provider																
Yes	1520.8	6.6*	6.4	6.9	621.3	2.7*	2.5	2.9	256.3 ^E	1.0*	0.9	1.2	450.4	1.8*	1.7	2.0
No†	160.4	3.6	3.2	4.0	75.5	1.7	1.4	2.0	37.3	0.8 ^E	0.6	1.0	50.5	1.0	0.8	1.3
Long-term care insurance																
Yes	414.9	3.7	3.4	4.0	118.4	1.1*	0.9	1.2	48.2	0.4*	0.3	0.5	86.8	0.8*	0.7	0.9
No†	424.4	3.7	3.4	3.9	257.0	2.2	2.0	2.5	83.8	0.7	0.6	0.9	212.7	1.8	1.6	2.1
Don't know	76.0	1.7*	1.5	2.0	53.1	1.2*	1.0	1.5	16.6 ^E	0.4 ^{E*}	0.3	0.6	41.2	0.9*	0.7	1.2
Needs-related factors																
Number of chronic conditions																
None†	183.3	1.2	1.1	1.4	69.4	0.5	0.4	0.6	30.4 ^E	0.2 ^E	0.1	0.3	44.5	0.3	0.2	0.4
One	208.2	3.2*	2.8	3.5	69.0	1.0*	0.8	1.3	23.2	0.4*	0.3	0.5	54.3	0.8*	0.6	1.1
Two	189.2	5.8*	5.3	6.5	89.9	2.8*	2.3	3.3	35.4 ^E	1.1 ^{E*}	0.8	1.5	74.2	2.3*	1.9	2.8
Three or more	305.1	12.2*	11.3	13.2	187.8	7.5*	6.8	8.3	56.3	2.3*	1.9	2.7	158.7	6.4*	5.7	7.1
Self-perceived health																
Fair, poor	394.9	12.6*	11.7	13.5	238.0	7.6*	6.9	8.4	79.5	2.5*	2.1	3.1	199.7	6.4*	5.7	7.2
Good, very good, excellent†	522.0	2.2	2.0	2.3	192.9	0.8	0.7	0.9	69.6	0.3	0.2	0.4	144.5	0.6	0.5	0.7
Time spent in hospital (past 12 months)																
None†	549.3	2.1	2.0	2.3	289.7	1.1	1.0	1.2	89.3	0.3	0.3	0.4	12.2	0.9	0.8	1.0
One to seven nights	218.5	15.2*	13.8	16.6	81.3	5.7*	4.8	6.7	34.8	2.4 ^E	1.8	3.2	6.6	4.2*	3.4	5.2
Eight or more nights	142.5	38.4*	34.3	42.6	58.7	15.9*	12.9	19.5	24.7 ^E	6.7 ^{E*}	4.7	9.4	6.4	12.6*	9.8	16.1

x suppressed to meet the confidentiality requirements of the *Statistics Act*

^E use with caution

* significantly different from reference category ($p < 0.05$)

† reference category

Source: 2015/2016 Canadian Community Health Survey.

The presence of chronic conditions was established by asking respondents whether a health professional had diagnosed them as having a condition that had lasted or was expected to last at least six months. The interviewer read a list of conditions. The individual conditions used in this study included arthritis, fibromyalgia, back problems excluding fibromyalgia and arthritis, COPD, diabetes, heart disease, cancer, effects of stroke, Alzheimer’s disease or other dementia, chronic fatigue syndrome, multiple chemical sensitivities, mood disorder, anxiety disorder. The number of chronic conditions was categorized into four groups: none, one, two, and three or more.

Self-perceived health was categorized as fair/poor versus excellent/very good/good.

Respondents were asked, “Excluding time spent in an emergency department, in the past 12 months, have you been a patient overnight in a hospital?” If yes, they were subsequently asked, “For how many nights in the past 12 months?” Time spent in hospital was categorized as zero nights, one to seven nights, or eight or more nights.

Barriers to home care

Those who indicated a time in the past 12 months when home care services were needed and not received were asked, thinking of the most recent time, why they did not get those services. Response categories used were availability (i.e., not available in the area or at the time required, waiting time too long, still waiting), eligibility (i.e., doctor said it was not necessary, not eligible for services), personal characteristics (i.e., language, didn’t know where to go, didn’t get around to it), cost, decided not to seek services, and other.

Respondents also indicated whether they had tried to get these home care services from a government Home Care Program (e.g., CLSC in Quebec, CCAC in Ontario, Extra-Mural Program in New Brunswick), a private agency, a family member, friend or neighbour, a volunteer

organization, or other, or whether they did not try to get services.

Analytical techniques

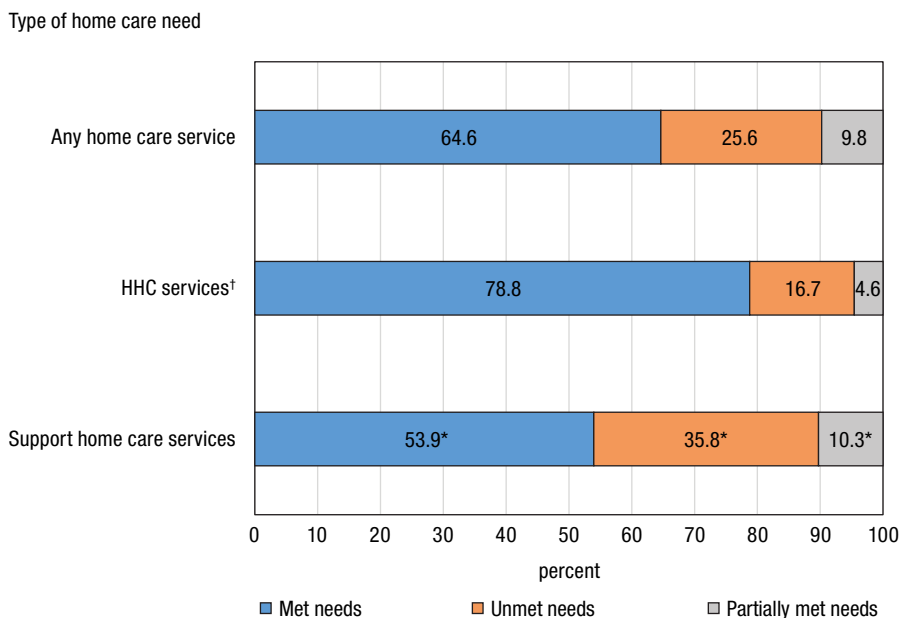
Weighted frequencies and cross-tabulations were calculated to examine, by selected characteristics, the proportion of community-living Canadians aged 18 or older receiving home care or with unmet home care needs. The reasons home care was not received and where individuals sought services were also examined. Analysis was restricted to individuals who had received home care or had unmet home care needs themselves. Responses of “don’t know” or “not stated” were 1.5% or less and were excluded from analysis for all variables with the exception of long-term care insurance, which had a higher proportion of missing values (2.5%).

Multivariate logistic regression models were used to determine the independent association between selected predisposing, enabling and needs-related

characteristics and unmet home care needs (overall and by type), versus no unmet needs. Because of high correlations between measures of SES, only household income was retained in the logistic regression models. While moderate correlation exists between some of the variables in the model, variance inflation factors (≤ 2.9) and tolerance estimates (≥ 0.2) demonstrated that multicollinearity was not a problem. Because of the non-linear relationship between unmet need and age (Figure 1), the multiple logistic regression was run with age (continuous) and age squared. This yielded coefficients with opposite signs. However, age groups were retained in the final model for ease of interpretation.

Person-level sampling weights were used to account for the survey design and non-response. Bootstrap weights were applied using SAS-Callable SUDAAN 11.0 to account for the underestimation of standard errors caused by the complex survey design.¹⁵ The significance level was set at $p < 0.05$.

Figure 2
Percentage distribution of home care need status, by type of home care, household population aged 18 or older with home care need, past 12 months, Canada, 2015/2016



* significantly different from reference category ($p < 0.05$)

[†] reference category

Source: 2015/2016 Canadian Community Health Survey.

Results

Prevalence in the adult population

In 2015/2016, an estimated 3.3% of Canadians aged 18 or older (919,000 people) had received home care services in the past year (Table 1). A perceived unmet need for home care services was reported by 1.6% of the adult population (433,000 people).

Women, older individuals and people living alone, as well as those with lower SES, with a regular doctor or in poorer health, were more likely to have received home care or to have an unmet home care need of either type. Those who had insurance that covered all or part of long-term care costs, including home care, were no more or less likely to have received home care services, but they were significantly less likely to have an unmet home care need.

Unmet need for support services was more prevalent than for HHC services (1.3% versus 0.5%). Women were more likely than men to have an unmet support need (1.7% versus 0.8%) but no more likely than men to have an unmet HHC need.

Home care need population

Home care need status

The majority of the adult population did not have a need for home care (95.5%; 95% confidence interval, 95.3% to 95.7%). That is, they neither received home care services nor identified an unmet home care need. Among the estimated 1.2 million people with home care needs in the past year, just over one-third (35.4%) reported some level of unmet needs: 25.6% had unmet needs and 9.8% had partially met needs (Figure 2). Compared with those with an HHC need, individuals with a support need were more likely to have unmet needs (36% versus 17%) or partially met needs (10% versus 5%).

Barriers to home care

Among those with a perceived unmet home care need, the most frequently reported barrier to obtaining care was the availability of services (28%) (Table 2). A higher proportion of people indicated

that availability issues affected their ability to obtain HHC services than did so for support services (42% versus 25%). Personal characteristics such as language, not knowing where to go or not getting around to it were barriers for one-quarter (25%) of those with an unmet need, costs for one-fifth (21%), and not being eligible or their doctor not thinking it was not necessary for 14%.

Nearly two-thirds (63.4%) of those with a perceived unmet home care need tried to get help. HHC services were more frequently sought from government home care programs than were support services (55% versus 42%). Individuals also sought help from private agencies (7.8%) and volunteer organizations (3.3%), while 6.6% turned to informal networks of family members, friends or neighbours to seek care.

Unmet home care needs by age

The relationship between age and perceived unmet home care needs is not linear. Among those with a home care need, the percentage for whom that

need was unmet increased with age until ages 40 to 44 and then declined again, forming an inverted u-shape (line in Figure 1). However, the estimated number of people with perceived unmet home care needs increased at ages 50 to 64 and dipped slightly at ages 65 to 69 before increasing again (bars in Figure 1).

Multivariate analysis

When predisposing, enabling and needs-related factors were considered together in the multivariate analysis (Table 3) of the population with home care needs, the 35-to-49 age group had significantly higher odds of having an unmet need. Meanwhile, the age groups 65 or older had lower odds compared with the youngest age group (18 to 34). Couples living together had significantly lower odds (0.7) of having an unmet need than individuals living alone.

Not having long-term care insurance was associated with increased odds of having an unmet home care need of either type, but household income was not. Results were similar when other

Table 2

Perceived barriers to receipt of home care services and where these services were sought, by type of unmet home care need, household population with a perceived unmet home care need, aged 18 or older, Canada, 2015/2016

Barrier	Type of unmet home care need								
	Any			HHC			Support		
	95% confidence interval			95% confidence interval			95% confidence interval		
%	from	to	%	from	to	%	from	to	
Barrier									
Availability [†]	28.2	24.7	32.0	41.7	34.5	49.3	25.4	21.4	29.8
Eligibility [†]	14.4	11.9	17.2	17.4 ^E	13.0	22.9	13.5	10.9	16.8
Personal characteristics [§]	24.5	21.4	27.9	23.1 ^E	17.6	29.6	26.0	22.4	29.9
Cost	20.7	17.7	24.1	17.6 ^E	12.8	23.7	23.1	19.5	27.1
Decided not to seek services	11.2	9.2	13.7	8.1 ^E	5.5	11.9	11.6	9.2	14.4
Other	23.3	20.3	26.6	23.2	18.2	29.1	23.0	19.6	26.9
Where home care services were sought									
Government home care program	43.4	39.5	47.4	54.8	48.2	61.3	42.1	37.6	46.8
Private agency	7.8	6.1	9.9	7.2 ^E	5.0	10.3	8.0	6.1	10.4
Family member, friend or neighbour	6.6 ^E	4.9	8.9	8.3 ^E	4.8	13.7	7.4 ^E	5.4	10.2
Volunteer organization	3.3 ^E	2.2	4.9	3.7 ^E	2.1	6.4	3.8 ^E	2.5	5.8
Nowhere—did not try to get service	36.6	33.1	40.2	28.7	23.3	34.7	37.1	33.0	41.3
Other	11.5	9.5	14.0	9.5 ^E	6.7	13.4	12.2	9.8	15.1

^E use with caution

[†] availability includes not available in the area, at time required, waiting time too long and still waiting

[†] eligibility includes doctor said it was not necessary and not eligible for services

[§] personal characteristics include language, didn't know where to go didn't get around to it

Note: Because respondents could report more than one type of barrier or source of services, the sum of the percentages exceeds 100%.

Source: 2015/2016 Canadian Community Health Survey.

Table 3
Prevalence and adjusted odds ratios (AOR) relating selected predisposing, enabling and needs-related characteristics to perceived unmet home care need by type, population aged 18 or older with home care need[‡] in the past 12 months, Canada, 2015/2016

Characteristic	Unmet need for any home care service						Unmet need for HHC services						Unmet need for support services					
	%	95% confidence interval		AOR	95% confidence interval		%	95% confidence interval		AOR	95% confidence interval		%	95% confidence interval		AOR	95% confidence interval	
		from	to		from	to		from	to		from	to		from	to		from	to
Total	35.4	33.2	37.5	...	...	...	21.2	18.8	23.9	...	...	...	46.1	43.3	48.8	...	...	...
Predisposing characteristics																		
Sex																		
Men [†]	33.0	29.5	36.7	1.0	...	...	22.8	18.5	27.7	1.0	...	...	42.9	38.1	47.8	1.0	...	...
Women	36.7	34.2	39.4	1.1	0.9	1.4	20.2	17.5	23.2	0.8	0.6	1.2	47.7	44.4	51.0	1.2	0.9	1.6
Age group																		
18 to 34 [†]	33.8	27.5	40.8	1.0	...	...	19.1 ^E	13.5	26.2	1.0	...	...	54.8	43.4	65.7	1.0	...	...
35 to 49	52.7*	46.2	59.1	1.8*	1.2	2.7	32.7*	25.4	41.0	1.9*	1.0	3.4	71.9*	64.1	78.7	2.0*	1.1	3.5
50 to 64	42.5*	37.9	47.3	0.9	0.6	1.3	27.3	21.8	33.7	1.0	0.5	2.0	58.0	52.0	63.8	0.9	0.5	1.6
65 to 74	30.1	26.2	34.3	0.5*	0.3	0.7	15.4	11.8	19.8	0.5*	0.3	1.0	41.0*	35.9	46.5	0.4*	0.2	0.7
75 to 84	29.7	25.4	34.4	0.4*	0.3	0.7	15.7 ^E	11.3	21.4	0.5*	0.2	1.0	35.7*	29.9	41.8	0.3*	0.2	0.6
85 or older	22.3*	17.6	27.7	0.3*	0.2	0.5	15.6 ^E	9.0	25.8	0.4*	0.1	1.0	25.3*	19.7	31.9	0.2*	0.1	0.4
Household type																		
Person living alone [†]	37.6	35.1	40.0	1.0	...	...	21.8	18.8	25.2	1.0	...	...	40.6	37.7	43.6	1.0	...	...
Couple alone	29.0*	25.5	32.8	0.7*	0.5	0.9	18.6	14.7	23.3	0.8	0.5	1.2	40.3	35.1	45.8	1.4	0.9	2.3
Parent(s) with child(ren) younger than 25	39.4	34.3	44.8	0.8	0.6	1.2	21.3	16.5	27.1	0.7	0.4	1.3	64.5*	56.7	71.6	1.0	0.5	1.8
Parent(s) with child(ren) 25 or older	31.6	24.1	40.1	0.8	0.5	1.2	23.3 ^E	14.8	34.8	1.1	0.6	2.0	41.8	31.1	53.2	1.4	0.7	2.9
Other	45.4 ^E	31.7	59.8	1.2	0.7	2.1	x	x	x	1.5	0.6	4.1	59.0*	43.4	73.0	0.9	0.6	1.4
Enabling resources																		
Household income																		
\$0 to \$39,999	38.9*	36.1	41.7	1.1	0.8	1.5	22.9	19.7	26.6	1.0	0.6	1.5	44.8	41.4	48.3	0.9	0.6	1.4
\$40,000 to \$79,999	33.9	29.8	38.3	1.1	0.8	1.5	19.6	15.2	24.8	0.9	0.6	1.4	46.9	41.4	52.4	1.2	0.8	1.8
\$80,000 or more [†]	31.0	26.6	35.8	1.0	...	...	20.6	16.0	26.3	1.0	...	...	47.9	40.8	55.1	1.0	...	...
Regular health care provider																		
Yes	34.7*	32.4	37.0	0.8	0.6	1.1	20.5	18.0	23.3	0.7	0.4	1.2	45.5	42.6	48.4	0.9	0.6	1.4
No [†]	43.5	36.5	50.7	1.0	...	...	30.8 ^E	21.7	41.8	1.0	...	...	53.1	44.2	61.9	1.0	...	...
Long-term care insurance																		
Yes [†]	24.1	21.4	27.1	1.0	...	...	15.0	12.0	18.5	1.0	...	...	33.6	29.4	38.0	1.0	...	...
No	42.4*	39.3	45.5	2.5*	2.0	3.0	26.1*	22.2	30.4	2.1*	1.5	3.0	51.6*	48.0	55.3	2.7*	2.1	3.5
Don't know	44.4*	38.1	50.8	2.5*	1.8	3.5	26.9 ^{E*}	19.4	36.1	2.1*	1.2	3.7	56.8*	49.1	64.2	3.1*	2.1	4.8
Needs-related factors																		
Number of chronic conditions																		
None [†]	29.1	24.3	34.3	1.0	...	...	19.1 ^E	13.9	25.6	1.0	...	...	42.1	34.7	49.8	1.0	...	...
One	26.9	22.3	32.1	1.1	0.8	1.6	15.4	11.7	20.0	1.0	0.5	1.7	36.8	29.8	44.3	1.1	0.6	1.8
Two	35.5	30.6	40.6	1.6*	1.1	2.3	24.3	18.1	31.8	1.6	0.9	3.0	46.2	39.7	52.9	1.6	1.0	2.5
Three or more	43.5*	40.3	46.7	2.0*	1.4	2.9	24.6	20.7	28.9	1.5	0.8	2.7	51.9*	48.4	55.5	1.9*	1.2	3.1
Self-perceived health																		
Fair, poor	43.6*	40.4	46.8	1.7*	1.3	2.1	25.4*	21.5	29.8	1.4	0.9	2.0	52.4*	48.5	56.2	1.6*	1.2	2.1
Good, very good, excellent [†]	28.6	26.0	31.4	1.0	...	...	17.7	14.8	21.1	1.0	...	...	39.5	35.7	43.4	1.0	...	...
Time spent in hospital (past 12 months)																		
None [†]	37.7	35.1	40.3	1.0	...	...	23.7	20.3	27.5	1.0	...	...	45.6	42.6	48.7	1.0	...	...
One to seven nights	29.5*	25.2	34.2	0.7*	0.5	0.9	17.5*	13.4	22.4	0.7	0.4	1.0	46.7	39.6	53.8	1.1	0.8	1.5
Eight or more nights	34.4	28.9	40.4	0.9	0.7	1.1	19.8 ^E	14.4	26.5	0.8	0.5	1.2	47.3	39.6	55.1	1.1	0.8	1.6

... not applicable

x suppressed to meet the confidentiality requirements of the *Statistics Act*

^E use with caution

* significantly different from reference category ($p < 0.05$)

[†] reference category

[‡] received home care services and/or identified an unmet home care need in the past 12 months for the specified type of home care

Source: 2015/2016 Canadian Community Health Survey.

measures of SES (household education, social assistance income or dwelling ownership; data not shown) were entered in the model individually in place of household income.

Needs-related factors were significantly associated with unmet needs. However, the association with the number of chronic conditions did not reach significance for unmet HHC needs. Having spent one to seven nights in hospital was significantly associated with lower odds of unmet home care needs overall.

Discussion

According to the 2015/2016 CCHS, an estimated 433,000 adults perceived that their home care needs were unmet at least to some degree. This is slightly lower than a previous estimate of 461,000 Canadians aged 15 or older with unmet home care needs from the 2012 General Social Survey (GSS).⁸ The estimate in this study may differ because the CCHS home care questions specify to exclude informal help from “family, friends and neighbours,” while the GSS specifies to “think of both professional care, and care from family and friends.” The extent to which the availability of informal care may influence the perception of unmet home care needs is unknown.

People in the age groups 65 and older had lower odds of having unmet home care needs even after predisposing, enabling and needs-related factors were accounted for. The older individuals with the greatest potential for unmet home care needs may no longer be living in the community and therefore may not be reflected in this study population. Additionally, home care services may be more available for the senior population.⁸ The significantly higher odds of having unmet home care needs in the 35-to-49 age group suggest a possible service gap and may represent adults living with disabilities.

Living in a couple rather than alone was associated with decreased odds of having unmet home care needs overall. Access to informal care from a partner

could influence the perception of unmet home care needs.

SES was not significantly associated with unmet home care needs once needs-related factors were controlled for in the model. This finding is consistent with some previous Canadian studies^{16,17} and contrary to another⁸ that combines home care and informal care.

In Canada, publicly funded home care services are provided by the provinces and territories, as well as by several federal departments and agencies (e.g., Veterans Affairs Canada, the Department of National Defence, Indigenous Services Canada, the Royal Canadian Mounted Police).² However, jurisdictions vary regarding eligibility, types and amounts of services provided and whether clients need to pay for a portion of home care.^{2,18} Individuals may also access home care through private or volunteer organizations.

Variation in access to and financial coverage of home care services may contribute to the more than one-quarter (28%) of those with an unmet need citing availability of services as a barrier and one-fifth (21%) citing cost as a barrier. Personal characteristics such as language, not knowing where to go or not getting around to it were barriers for one-quarter (25%) of those with unmet needs. This suggests that programs to increase awareness of and ease of access to existing services are important. Additionally, 23% reported “other” reasons for not obtaining needed home care services. That warrants further investigation.

While the CCHS asked specifically about home care services that were provided by someone other than a family member, friend or neighbour, a proportion of those with unmet needs turned to informal networks to have those needs met (6.6%). This highlights that the need for home care services and informal caregiving may influence each other. Future research could address whether those seeking care from informal networks did so as a matter of preference or because public or private options were not available or affordable for them.

Unmet support needs were more prevalent than unmet HHC needs. This is consistent with previous research on seniors.¹⁹ This may be related to differences in the availability and public funding of different home care services.

Although HHC and support services differ in the nature of care provided, the multivariate analyses showed few differences in the correlates of having an unmet need for either type of home care. In the cases of number of chronic conditions and fair or poor self-perceived health, this may be a matter of statistical power since the odds ratios follow the same pattern.

Strengths and limitations

Strengths of this analysis include a large population-based sample, the examination of unmet needs by type (HHC and support) and the determination of whether needs were fully or partially unmet.

Some limitations must also be acknowledged. The cross-sectional design does not imply causality. How the availability of informal care may affect needs for home care services is unknown. Moreover, the CCHS asked about the perception of unmet home care needs. This excluded people who do not perceive a need but may still have benefited from home care services.

Conclusion

Just over one-third of community-living adults with perceived home care needs did not have those needs met in 2015/2016. This was more prevalent among those with support needs than home health care (HHC) needs. The availability of services was most often cited as a barrier to obtaining home care services, particularly for those with an unmet need for HHC services. Age group, household type, long-term care insurance and health status factors were associated with perceiving an unmet home care need, with few differences by type of unmet need. ■

References

1. Canadian Institute for Health Information. Technical note: *Home care expenditures in the NHEX Database*. November 2017. Available at: https://www.cihi.ca/sites/default/files/document/technical_notes_on_home_care-nhex2017-en.pdf. Accessed May 2, 2018.
2. Canadian Home Care Association. *Portraits of home care in Canada*. Mississauga: Canadian Home Care Association, 2013.
3. Canadian Healthcare Association. *Home care in Canada: From the margins to the mainstream*. Ottawa: Canadian Healthcare Association, 2009.
4. Sands LP, Wang Y, McCabe GP, et al. Rates of acute care admissions for frail older people living with met versus unmet activity of daily living needs. *Journal of the American Geriatric Society* 2006, 54(2): 339-344.
5. Gaugler, J. E., Kane, R. L., Kane, R. A., & Newcomer, R. Unmet care needs and key outcomes in dementia. *Journal of the American Geriatrics Society* 2005; 53: 2098-2105.
6. Chen Y-M, Thompson EA. Understanding factors that influence success of home- and community-based services in keeping older adults in community settings. *Journal of Aging and Health* 2010; 22(3): 267-291.
7. Choi, G. N., & McDougall, G. Unmet needs and depressive symptoms among low-income older adults. *Journal of Gerontological Social Work* 2009; 52: 567-583.
8. Turcotte M. Canadians with unmet home care needs. *Insights on Canadian Society* 2014; September: 1-11.
9. Goodridge D, Hawranik P, Duncan V, Turner H. Socioeconomic disparities in home health care service access and utilization: A scoping review. *International Journal of Nursing Studies* 2012; 49: 1310-19.
10. Mery G, Wodchis WP, Laporte A. The determinants of the propensity to receive publicly funded home care services for the elderly in Canada: a panel two-stage residual inclusion approach. *Health Economics Review* 2016; 6: 8.
11. Andersen RM. Revisiting the behavioral model and access to medical care: Does it matter? *Journal of Health and Social Behavior* 1995; 36: 1-10.
12. Sunderland A, Findlay LC. Perceived need for mental health care in Canada: Results from the 2012 Canadian Community Health Survey-Mental Health. *Health Reports* 2013; 24(9): 3-9.
13. Ferris RE, Glicksman A, Kleban MH. Environmental predictors of unmet home-and community-based service needs of older adults. *Journal of Applied Gerontology* 2016; 35(2): 179-208.
14. Casado BL, van Vulpen KS, Davis SL. Unmet needs for home and community-based services among frail older Americans and their caregivers. *Journal of Aging and Health* 2010; 23(3): 529-553.
15. Rust KF, Rao JNK. Variance estimation for complex surveys using replication techniques. *Statistical Methods in Medical Research* 1996; 5(3): 283-310.
16. Busque MA, Légaré J. Les besoins non comblés de services à domicile chez les aînés canadiens. *Canadian Journal on Aging* 2012; 31(3): 271-283.
17. Wilkins K, Park E. Home care in Canada. *Health Reports* 1998; 10(1): 29-37.
18. Health Council of Canada. *Seniors in need, caregivers in distress. What are the home care priorities for seniors in Canada?* Toronto: Health Council of Canada, 2012.
19. Hoover M, Rotermann M. Seniors' use of and unmet needs for home care, 2009. *Health Reports* 2012; 23(4): 55-60.