Government-subsidized home care

by Kathryn Wilkins

Keywords: activities of daily living, homemaker services, public welfare, social service

In 1994/95, over half a million people, or 2.5% of the population aged 18 or older, received some form of government-subsidized home care (see *Data sources* and *The questions*). By 2003, although the estimated number of recipients had increased by about 125,000, the proportion of the population receiving such care—2.7%—did not differ significantly from the 1994/95 figure.

In some ways, the characteristics of home care recipients were similar in both periods (Table 1). For example, the sex distribution remained the same, at about two-thirds women and one-third men. There was also no significant change in the proportion who depended on social assistance as their main source of income.

Recipients younger

In other ways, the characteristics of recipients of government-subsidized home care changed over the eight years. Curiously, their average age fell from just under 65 in 1994/95 to 62 in 2003. By contrast, the average age of the general population aged 18 or older rose from 44.1 to 45.5 over the same period.

The days spent in hospital by those home care recipients who had been hospitalized in the previous year also declined. Between 1994/95 and 2003, the average number of days spent in hospital fell sharply from 13.4 to 8.6. This decrease likely reflects the reduction in the length of hospital stays overall.[1] Although information on health status at the time of discharge is not available, shorter stays may result in a greater need for care when patients return home.

Table 1
Selected characteristics, recipients of government-subsidized home care

	1994/95	2003
Number (% of population 18 or older)	522,900 (2.5)	647,800 (2.7)
Average age (years)	64.9	62.0*
Male (%)	32.7	34.6
Social assistance is main source of income (%)	38.9	33.8
Average number of days hospitalized in past year	13.4	8.6*

* *Significantly different from estimate for 1994/95 ($p < 0.05$)*
Sources: *1994/95 National Population Health Survey; 2003 Canadian Community Health Survey*

More need nursing, personal care

In view of shorter hospital stays, it was not surprising that, in 2003, people who had been hospitalized during the previous 12 months were significantly more likely to receive government-subsidized home care (16%) than were their counterparts in 1994/95 (12%) (Table 2).

Of people who received home care, the proportion receiving nursing or personal care was up substantially in 2003. That year, 52% of home care clients received nursing care, compared with 39% in 1994/95 (Chart 1). By contrast, the percentage receiving assistance with housework dropped from 51% to 33%. Clearly, a shift to more specialized services occurred. The increase in the number of nursing care recipients is particularly important in the context of concerns about shortages of qualified nurses.

Table 2

Percentage receiving government-subsidized home care in 1994/95 and 2003, by selected characteristics, household population aged 18 or older

	1994/95	2003
Socio-demographic		
Aged 80 or older	22.3	19.0
Lives alone	7.5	5.9*
Social assistance is main source of income	9.1	9.4
Activities of daily living (ADL) dependency		
Needs help with personal care	46.3	35.2*
Needs help to move around in house	38.6	24.2*
Illness/Injury-related factors		
Poor health	20.5	17.9
Effects of stroke	25.6	20.0
Urinary incontinence	16.9[E]	14.6
Diabetes	11.3	9.0
Cancer	13.5[E]	16.7
Heart disease	14.7	11.8
High blood pressure	7.2	6.0
Activity-limiting injury in past year	3.3	3.4
Hospitalized in past year	12.1	16.4*
Obese class II/III (body mass index ≥ 35)	2.3[E]	5.2*

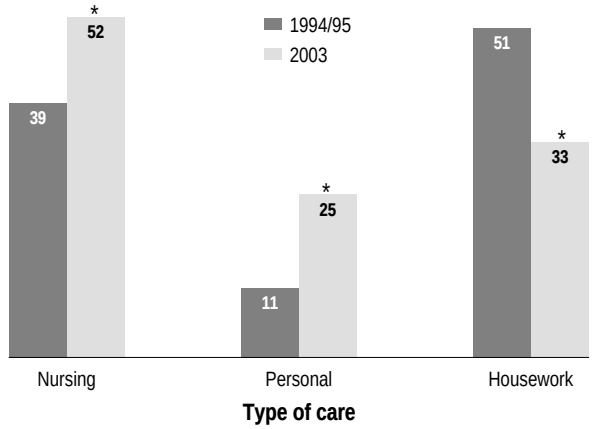
* *Significantly different from estimate for 1994/95 ($p < 0.05$)*
[E] *Use with caution (coefficient of variation 16.6% to 33.3%)*
Sources: *1994/95 National Population Health Survey; 2003 Canadian Community Health Survey*

Smaller share now receiving help

Again, perhaps because of the trend toward shorter hospital stays, along with the aging of the population, the number of household residents who needed help with personal activities of daily living or with moving about in their homes increased substantially between 1994/95 and 2003. But despite government-subsidized home care services reaching greater numbers of people in 2003, a smaller share of individuals with these basic needs received care (Table 2).

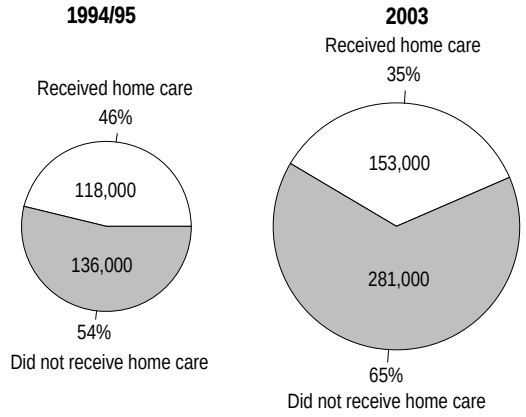
In 1994/95, an estimated 254,000 people needed help with some aspect of their personal activities (eating, bathing or dressing); nearly half of them received care (Chart 2). By 2003, the number needing help with such tasks had climbed to 434,000. Although the number receiving home care had increased to 153,000, this represented just over a third (35%) of those needing assistance.

Chart 1
Percentage receiving specific services, household population aged 18 or older receiving government-subsidized home care



* *Significantly different from estimate for 1994/95 ($p < 0.05$)*
Sources: *1994/95 National Population Health Survey; 2003 Canadian Community Health Survey*

Chart 2
Percentage and number of people receiving government-subsidized home care among those needing help with eating, bathing or dressing, household population aged 18 or older



Sources: *1994/95 National Population Health Survey; 2003 Canadian Community Health Survey*

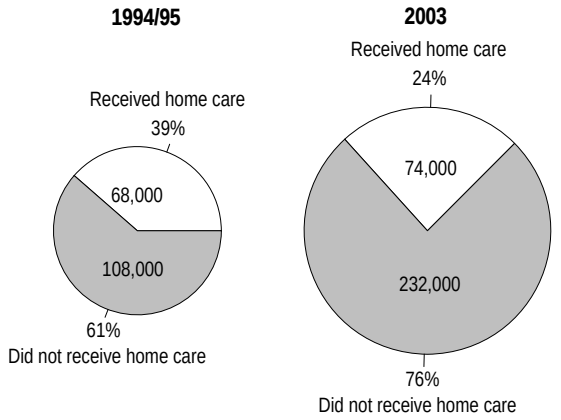
Data sources

Estimates are based on data from the 1994/95 National Population Health Survey (NPHS) and the 2003 (cycle 2.1) Canadian Community Health Survey (CCHS) for respondents aged 18 or older. The NPHS covers household and institutional residents in all provinces and territories, except persons on Indian reserves, on Canadian Forces bases and in some remote areas. In 1994/95, 17,276 of the 20,095 individuals selected agreed to participate in the NPHS, for a response rate of 86.0%. More detailed descriptions of the NPHS design, sample and interview procedures can be found in a published report.[2]

The CCHS covers the household population aged 12 or older in all provinces and territories, except all members of the regular Armed Forces and people living on Indian reserves and in some remote areas, and civilian residents of military bases. Data for cycle 2.1 were collected between January and December 2003. The overall response rate was 80.6%, and the sample size was 135,573. More detail about the sample design of the CCHS is available in a previously published report.[3]

Variance on estimates, and on differences between estimates, was calculated using the bootstrap technique, which accounts for the complex design of the surveys.[4-6] A significance level of $p < 0.05$ was used.

Chart 3
Percentage and number of people receiving government-subsidized home care among those needing help to move around in house, by receipt of government-subsidized home care, household population aged 18 or older



Sources: *1994/95 National Population Health Survey; 2003 Canadian Community Health Survey*

Similarly, in 1994/95, 39% of people who required help to move about in their homes received government-subsidized home care; by 2003, the figure had fallen to 24%, even though the absolute number receiving care had increased (Chart 3).

These findings suggest that some of the burden of care may have shifted to private home care agencies, or to family members and friends.

The percentage of people living alone who received government-subsidized home care fell slightly, but significantly, from 7.5% in 1994/95 to 5.9% in 2003. This was somewhat surprising, because the likelihood of being eligible for such services is greater for people who have no informal support.[7] Perhaps people who live alone are increasingly self-sufficient, or alternatively, are relying more on friends, neighbours or relatives.

Chronic conditions

For the most part, the likelihood that people with specific chronic conditions would receive government-subsidized home care did not change significantly. For example, in 1994/95, 11% of people with diabetes received home care, similar to the figure of 9% in 2003 (Table 2). This was also generally true when receipt of home care was examined in multiple logistic regression models, which account for the influences of all variables simultaneously (data not shown).

The increasing importance of urinary incontinence as a determinant of home care is reflected in the growing proportion of home care recipients with this condition. In 1994/95, 8% of home care recipients were incontinent; by 2003,

The questions

The 1994/95 National Population Health Survey (NPHS) and the 2003 Canadian Community Health Survey (CCHS) asked respondents aged 18 or older the following yes/no question about *government-subsidized home care*: "Home care services are health care or homemaker services received at home, with the cost being entirely or partially covered by government. Examples are nursing care, help with bathing or housework, respite care, and meal delivery. Have you received any home care services in the past 12 months?" Those who had received care were asked what type:

- Nursing care
- Personal care
- Housework
- Meal preparation or delivery
- Shopping
- Other

Both surveys asked the following to establish *activities of daily living (ADL) dependency*: "Because of any condition or health problem, do you need the help of another person in: personal care such as washing, dressing, or eating? moving about inside the house?"

Level of *self-perceived health* was determined by asking: "In general, would you say your health is: excellent? very good? good? fair? poor?"

To determine the presence of *chronic conditions*, respondents were asked about any diagnosed long-term conditions that have lasted or were expected to last six months or more. *Effects of stroke, urinary incontinence, diabetes, cancer, heart disease* and *high blood pressure* were included in the list of conditions read to respondents.

Occurrence of *activity-limiting injury* was determined by asking respondents about injuries that "occurred in the past 12 months, that were serious enough to limit your normal activities. For example, a broken bone, a bad cut or burn, a sore back or sprained ankle, or a poisoning. In the past 12 months, did you have any injuries that were serious enough to limit your normal activities?"

All respondents were categorized based on their *body mass index* (BMI), a measure of weight adjusted for height. BMI is defined as weight (kilograms) divided by height (metres squared). Height and weight were self-reported by NPHS respondents. *Obese class II/III* is defined as a BMI of 35.0 or higher.

Living arrangements were defined as living alone or with others.

Respondents were asked about their *main source of income*; those who identified Canada or Québec pension, Old Age Security and Guaranteed Income Supplement, or provincial/municipal social assistance or welfare were categorized as receiving "social assistance" as their main income source.

To ascertain *hospitalization* in the past year, respondents were asked: "In the past 12 months, have you been a patient in a hospital, nursing home or convalescent home?"

the proportion had more than doubled to 17% (data not shown). This increase has serious implications for health care case managers and home care providers, as it adds to the burden of caregiving.

Kathryn Wilkins (613-951-1769; Kathryn.Wilkins@statcan.ca) is with Health Statistics Division at Statistics Canada, Ottawa, Ontario, K1A 0T6.

References

1 Neutel CI, Gao R-N, Gaudette L, et al. Shorter hospital stays for breast cancer. *Health Reports* (Statistics Canada, Catalogue 82-003) 2004; 16(1): 19-31.

2 Tambay J-L, Catlin G. Sample design of the National Population Health Survey. *Health Reports* (Statistics Canada, Catalogue 82-003) 1995; 7(1): 29-38.

3 Béland Y. Canadian Community Health Survey—Methodological overview. *Health Reports* (Statistics Canada, Catalogue 82-003) 2002; 13(3): 9-14.

4 Rao JNK, Wu CFJ, Yue K. Some recent work on resampling methods for complex surveys. *Survey Methodology* (Statistics Canada, Catalogue 12-001) 1992; 18(2): 209-17.

5 Rust KF, Rao JNK. Variance estimation for complex surveys using replication techniques. *Statistical Methods in Medical Research* 1996; 5: 281-310.

6 Yeo D, Mantel H, Liu TP. Boostrap variance estimation for the National Population Health Survey. *Proceeding of the Annual Meeting of the American Statistical Association, Survey Research Methods Section, August 1999*. Baltimore: American Statistical Association, 1999.

7 Hirdes JP, Tjam EY, Fries BE. *Eligibility for Community, Hospital and Institutional Services in Canada: A Preliminary Study of Case Managers in Seven Provinces*. (Substudy 8 of the National Evaluation of the Cost-effectiveness of Home Care) Ottawa: Health Canada, 2001.