Elder care and the complexities of social networks

by Kelly Cranswick and Derrick Thomas

We live in an aging society. And much has been written about how care will be provided to an aging population. Will the health care system through institutions, hospitals and home care provide the bulk of care? Or will family and friends chip in and assist their loved ones with everything from meals to personal care?

Social networks represent an important area of study because, unlike aging or health status, for many, they can be developed with relative ease by individuals and other stakeholders. We can't stop aging, and our capacity to affect our health as we age is limited, but we may be able to build social networks, adjust our living arrangements or otherwise change our behaviour to get the care we may need.

The size, quality and proximity of people's social networks are arguably among the things that determine whether seniors receive formal care delivered by professionals, rely on informal care provided by family and friends or, indeed, receive no care at all. The likelihood of receiving care of each type will perhaps depend partially on how many family members and friends a person has, whether they live close by, and the quality of the relationship with them.

In this article, we look at the relationship between the social networks of non-institutionalized seniors and whether they receive formal, informal or no care. Data are drawn mainly from the 2002 General Social Survey (GSS), supplemented by data from the 1996 GSS and the 2001 Census of Population.

More seniors in private households receive care

For the past two decades, the proportion of seniors who have been receiving care through institutions has been declining. Fewer than 10% of senior women and only about 5% of senior men—about 287,000 persons—resided in health care institutions in 2001.

There are a number of possible reasons for this shift. For example, seniors often prefer to age in the familiar surroundings of their own homes and neighbourhoods; most are living longer, often without serious health problems; and governments may find it less expensive to provide some form of support to seniors in their homes, rather than to assume broader responsibility for them in an institution.[1]

As a result, the proportion of seniors who have been receiving care while residing in a private home has been increasing. According to the 2002 GSS, about one-quarter of seniors—1.0 million—living in private households were receiving care due to a long-term health problem. About another 2% of seniors outside institutions were experiencing unmet caregiving needs; that is, they reported that they needed care but received none. This group was younger and healthier on average than those who said they were receiving the assistance they

CST What you should know about this study

Most of the data in this article come from the 2002 General Social Survey (GSS) on aging and social support. The GSS telephone survey covered the non-institutionalized population in the 10 provinces. Respondents were randomly selected from a list of individuals aged 45 and over who had responded to another Statistics Canada survey. Data were collected from about 25,000 respondents over an 11-month period from February to December 2002. Data was also used from the 1996 General Social Survey on aging and social support, as well as the 2001 Census of Population.

In order to help us explain how the type of care that a senior receives depends on their individual characteristics, we employed a series of multinomial logistic regression models. Among the characteristics examined for each senior were gender, age, level of education, whether or not they professed a religious affiliation, and whether or not they (or a household member) owned the home in which they lived. We also looked at some fairly direct measures of the proximity, size and quality of their social network, including: who lived with them; how many other family members they considered close; how many other friends they considered close; and their level of satisfaction with these relationships.

Multivariate models allow us to isolate the effect of each characteristic on the probability that a senior will receive formal care delivered by paid professionals, informal care provided by family or friends, or no care at all. When the effect of a particular characteristic is measured independently of the influence of the other characteristics in the model, it helps to ensure that the results observed are not due to the correlation between different characteristics. To examine the impact of one characteristic, all the others are held constant at their typical, most common or average value. Thus, the probability of receiving care is always calculated for a person who, with the exception of the characteristic being tested, is a *typical* or *average senior*.

Typical, average senior: A senior who represents all seniors, created by using the relevant characteristics at their typical, most common or average value. This senior is of average age (74.2 years) and average health (Health Utility Index of 0.78). He or she lives with their spouse, professes a religious affiliation, has a secondary school education, and lives in a home owned by themselves or a householdg tested, i2 c

Women are more likely to receive care because of a long-term health problem: over 30% compared with fewer than 20% of men. Even after taking account of age, health and other factors, senior women are more likely than men to receive help, particularly through the formal care system. The differing life spans and life cycles of men and women is no doubt one of the factors at play. Women, for example, tend to outlive their partners. Because the conditions under which they receive care often differ, men and women will generally be discussed separately in this article.

Poor health is the main reason seniors receive care

As one might expect, the most important determinant of receipt of care for men and women living outside an institution was health status. While the probability of receiving care was about 20% for seniors in average health, the probability of receiving care increased dramatically with declining health.

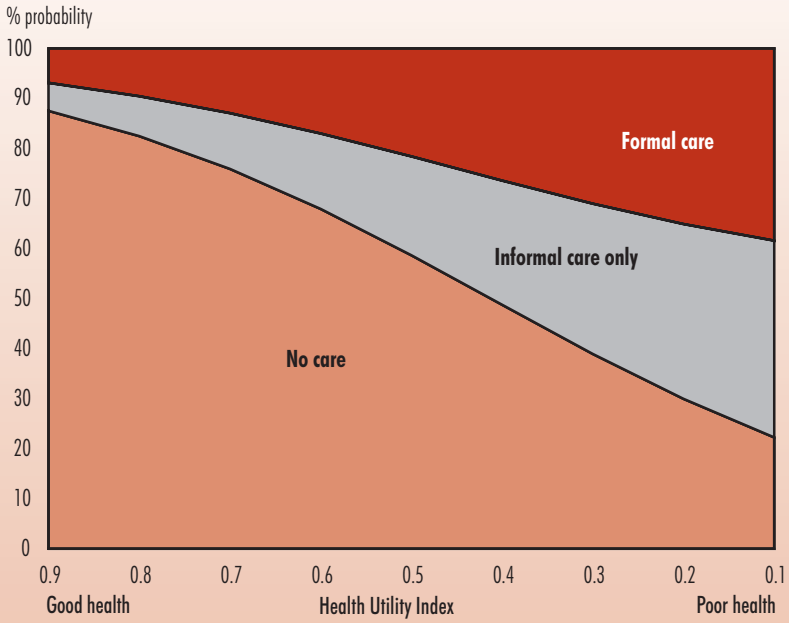
For the otherwise typical senior, the probability of receiving care rose from about 12% for those in very good health to almost 80% for the very ill. Although the actual probabilities were different for senior men than for women, the relationship between health and receipt of care remained the same. However, it is important to note that, while health status may help us to predict who will receive care, it is not a very good predictor of whether that care will be formal or informal.

Older seniors also receive more care

Of course, increasing age also has a strong impact on the care received by seniors. For the otherwise typical senior, the probability of receiving care increased with age.

The relationship is very reminiscent of the one between health and receipt of care, with the exception that people who were in stable health were more likely to receive formal as

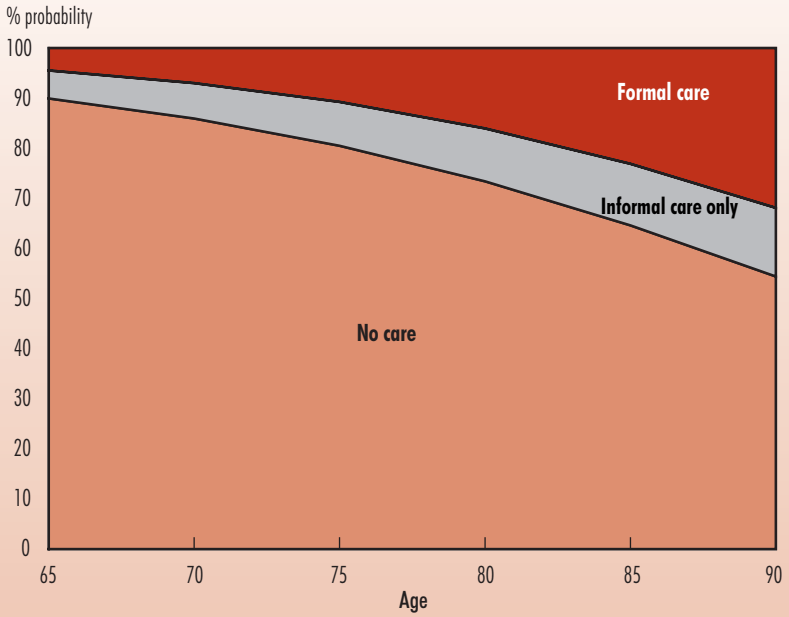
CST Seniors with poorer health receive more care of both types regardless of their age



Note: Probabilities are calculated for the typical senior, where health status varies but all other variables in the model are held constant. For the definition of the typical senior, see "What you should know about this study."

Source: Statistics Canada, General Social Survey, 2002.

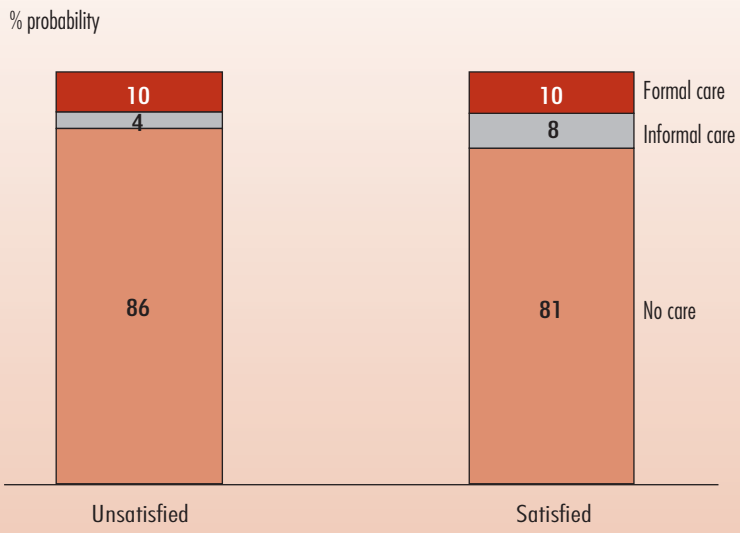
CST Seniors receive more formal care as they age because they are losing their social networks



Note: Probabilities are calculated for the typical senior, where age varies but all other variables in the model are held constant. For a definition of the typical senior, see "What you should know about this study."

Source: Statistics Canada, General Social Survey, 2002.

CST Seniors satisfied with their family network receive more informal care



Note: Probabilities are calculated for the typical senior, where relationship satisfaction varies but all other variables in the model are held constant. For a definition of the typical senior, see "What you should know about this study."

Source: Statistics Canada, General Social Survey, 2002.

opposed to informal care as they got older. This is at least partly due to the fact that advanced age is correlated with the decay of the support network that might have provided informal support and that older seniors are more likely to be without surviving close family or friends.

Living arrangements were associated with care received by women

The person with whom one lives represents a key aspect of one's social network, and senior men and women differ significantly in respect of their living arrangements. According to the 2002 GSS, two-thirds of non-institutionalized senior men lived in a two-person household with a spouse, while only a little over one-third of women did. Women most often lived alone (43%) while it was the least common arrangement among men (16%). About 19% of women and 17% of men opted for living with family and friends (this could include living with a spouse as well as other family members or friends).

For a typical man, the probability of receiving either formal or informal care was not significantly affected by his living arrangements.

For a typical woman, however, the probability of receiving formal care increased from about 9% for those who lived with children and others to almost 12% for those who lived with a spouse. Women who lived alone had the highest probability of receiving formal care at about 15%, while women living with children and others were more likely to rely on informal care. Somewhat surprisingly, however, women living with a spouse were the least likely to depend on informal care.

It is a little puzzling that more informal care was not received in two-person households. As we have seen, a substantial minority of senior women and the majority of men live with a spouse. The apparent lack of care in these arrangements might be traced to a divergence in each partner's understanding of what constitutes care. It may be that some categories of assistance such as meal preparation, laundry, transportation and home maintenance, are perceived as part of the traditional division of labour between spouses and are only identified as caregiving when one partner can no longer perform them. If the contributions of their spouses were apparent to them, it might well be that more informal care would be reported by both sexes and that living arrangements would be identified as a significant factor in the care received by men.

The size of the social network is important to receiving formal and informal care

For the average woman 65 years of age and older, the more relatives she feels close to, the more care she tended to receive; not surprisingly, this extra assistance is principally in the area of informal care. On the other hand, women with a large network of close female friends had a higher probability of receiving formal care. This suggests that while an extended family tends to take direct responsibility for the care of senior women, friends help them to seek out formal care. Alternately, it may be that people who maintain relationships with a relatively large number of friends also have a greater familiarity with the larger world which helps them to arrange formal care. On the other hand, extensive social networks seem to make little difference to the care men receive; in fact, having a large number of male friends was associated with less formal care.

Seniors who were satisfied with the kind and frequency of contact with family members were, all else being equal, more likely than other seniors to have received informal care. Meanwhile, satisfaction with the quality of their friendships was associated with the probability of receiving formal care, especially for men. Among women, the effect of

friends is described by the extent of the network.

Better educated seniors receive more formal care

The level of education they have attained has an impact on whether seniors get formal care or rely solely on informal care. The probability of receiving formal help increased from about 7% for the typical senior without high school to over 13% for the typical senior with a university degree or college diploma. All else held constant, educated people less often had to rely exclusively on informal care and were less likely to receive no care at all. The effect of education on receipt of care is a little stronger for men than for women.

This link may exist because educated persons are better able to negotiate the institutional channels that could prove a barrier to accessing formal care for less literate seniors. Education is also correlated with lifetime earnings and wealth, which may mean that people with more education have the means to pay for formal assistance.

Home ownership is associated with care for women

Another key measure of wealth—home ownership—has predictive power only for women. All other things being equal, typical senior women who lived in a home owned by themselves or a household member were more likely than renters to receive care (both formal and informal). The difference between owners and renters was somewhat greater for informal care.

Education captures the effect of household wealth for senior men, who earned that wealth over a long period of paid employment. Since women in this age group are not likely to have a similar work history, home ownership is a better predictor of financial resources available to wives, since it represents the assets built up by the couple. That there is a relationship between home ownership and care receipt for women may also lie in a greater propensity for women to adjust their living arrangements (that is, sell their home) when their spouse dies. Getting rid of the house can lessen the need for help with yard work or home maintenance, reducing a woman's dependence on the systems that provide this type of care.

Women who profess a religion receive more care

Senior women who reported having a religious affiliation were more likely to receive care than women who did not. They were more apt to receive informal care but were also more likely to get formal care. Acknowledging a religious affiliation may be indicative of membership in a community and suggests a social network on which one may be able to depend. Religion may also reflect traditional values or links with traditional networks (in the same way as a large family) that may allow one to receive care informally. This may be contrasted with the ostensibly weaker ties of friendship, which are associated with reliance on the formal system.

Frequency of attendance at religious services seemed, however, to be correlated positively with health status and was associated with less rather than more care (both formal and informal). This can likely be explained by people needing to be in fairly good health in order to attend a service.

For men, religion apparently played no role in the likelihood they would receive care.

Summary

As the proportion of seniors receiving care through institutions has been declining, the proportion receiving care outside them has been increasing. Seniors receive this care

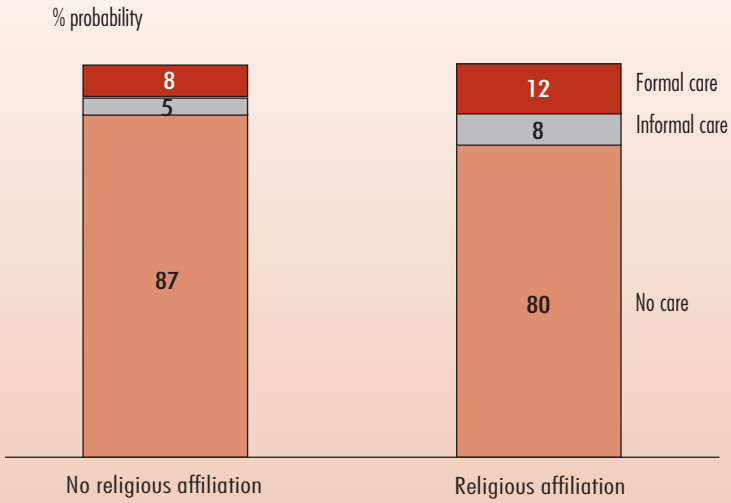
CST Women who live in their own home receive more formal and informal care

Note: Probabilities are calculated for the typical senior, where housing tenure varies but all other variables in the model are held constant. For a definition of the typical senior, seee "What you should know about this study."

* Owned by themselves or another household member.

Source: Statistics Canada, General Social Survey, 2002.

Women who profess a religious affiliation receive more care of both types



Note: Probabilities are calculated for the typical senior, where religious affiliation varies but all other variables in the model are held constant. For a definition of the typical senior, see "What you should know about this study."

Source: Statistics Canada, General Social Survey, 2002.

because of their declining health; however, the distribution of non-institutionalized seniors between the formal and informal systems seems to be conditioned by factors other than health. Perhaps due to shrinking informal networks, older seniors were more likely to receive formal care. Those with higher levels of education, many friends and satisfying relationships with friends were more likely to receive formal care; in contrast, those with large families or who professed a religion tended to rely on informal care. Women who lived alone acquired more formal care than those who lived with a spouse, who in turn received more than those who lived with their children or others.

It would be a mistake to view social networks as constraining or determining the receipt of care in the same way as health and age, or even education and income. Social networks and living arrangements are related to the type of care received in potentially more complex ways. It is possible for care receivers and providers to adjust their networks or living arrangements to obtain or provide care. While seniors cannot change their age or health status, they may contact friends, move in with family, move into an institution or even move to a different community, in order to get the help they require. Information about the value of social networks is important as seniors age and make choices affecting their overall well-being.

Kelly Cranswick is a senior analyst at the Statistics Canada Manitoba Research Data Centre and **Derrick Thomas** is a senior analyst with Social and Aboriginal Statistics Division, Statistics Canada.

1. In many ways, institutionalization extends or substitutes for formal care, thereby affecting the demand for, and receipt of, care in the community. Although there are important differences in the rate of institutionalization across jurisdictions, regional disparities do not substantially change the findings of this study.