

Denton, Margaret et al.

Working Paper

Where would you turn for help? Older adults' awareness of community health and support services for dementia care

QSEP Research Report, No. 440

Provided in Cooperation with:

Research Institute for Quantitative Studies in Economics and Population (QSEP), McMaster University

Suggested Citation: Denton, Margaret et al. (2010) : Where would you turn for help? Older adults' awareness of community health and support services for dementia care, QSEP Research Report, No. 440, McMaster University, Research Institute for Quantitative Studies in Economics and Population (QSEP), Hamilton (Ontario)

This Version is available at:

<https://hdl.handle.net/10419/66896>

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.

QSEP

**RESEARCH INSTITUTE FOR QUANTITATIVE
STUDIES IN ECONOMICS AND POPULATION**

**WHERE WOULD YOU TURN FOR HELP?
OLDER ADULTS' AWARENESS OF COMMUNITY SUPPORT SERVICES**

**MARGARET DENTON
JENNY PLOEG
JOSEPH TINDALE
BRIAN HUTCHISON
KEVIN BRAZIL
NOORI AKHTAR-DANESH
MONICA QUINLAN
JEAN LILLIE
JENNIFER MILLEN PLENDERLEITH
LINDA BOOS**

QSEP Research Report No. 440

**WHERE WOULD YOU TURN FOR HELP?
OLDER ADULTS' AWARENESS OF COMMUNITY SUPPORT SERVICES**

**MARGARET DENTON
JENNY PLOEG
JOSEPH TINDALE
BRIAN HUTCHISON
KEVIN BRAZIL
NOORI AKHTAR-DANESH
MONICA QUINLAN
JEAN LILLIE
JENNIFER MILLEN PLENDERLEITH
LINDA BOOS**

QSEP Research Report No. 440

June 2010

Margaret Denton is a QSEP Research Associate and a faculty member in Health, Aging and Society, McMaster University. Jenny Ploeg and Noori Akhtar-Danesh are faculty members in the School of Nursing, McMaster University. Brian Hutchison and Kevin Brazil are faculty members in C.E. & B., McMaster University. Joseph Tindale is a faculty member in Family Relations & Applied Nutrition, University of Guelph. Jean Lillie is a Ph.D. candidate in Family Relations & Applied Nutrition, University of Guelph. Monica Quinlan is with the United Way of Burlington and Hamilton. Jennifer Millen Plenderleith is a research coordinator in the Gilbrea Centre for Studies in Aging, McMaster University and Linda Boos is a research associate in the McMaster Centre for Gerontological Studies.

This report is cross-listed as No. 272 in the McMaster University SEDAP Research Paper Series.

The Research Institute for Quantitative Studies in Economics and Population (QSEP) is an interdisciplinary institute established at McMaster University to encourage and facilitate theoretical and empirical studies in economics, population, and related fields. For further information about QSEP visit our web site <http://socserv.mcmaster.ca/qsep> or contact Secretary, QSEP Research Institute, Kenneth Taylor Hall, Room 426, McMaster University, Hamilton, Ontario, Canada, L8S 4M4, FAX: 905 521 8232, Email: qsep@mcmaster.ca. The Research Report series provides a vehicle for distributing the results of studies undertaken by QSEP associates. Authors take full responsibility for all expressions of opinion.

Where Would You Turn for Help? Older Adults' Awareness of Community Health and Support Services for Dementia Care

Margaret Denton, Jenny Ploeg, Joseph Tindale, Brian Hutchison, Kevin Brazil, Noori Akhtar-Danesh, Monica Quinlan, Jean Lillie, Jennifer Millen Plenderleith and Linda Boos

First Published as:

Denton, M., Ploeg, J., Tindale, J., Hutchison, B., Brazil, K., Akhtar-Danesh, N., Quinlan, M., Lillie, J., Millen Plenderleith, J., Boos, L. (2008). Where Would You Turn for Help? Older Adults' Awareness of Community Support Services. *Canadian Journal on Aging*, 27(4), 359-370.

Copyright notice: © Cambridge University Press

Link to online edition of the journal at Cambridge Journals Online:

<http://journals.cambridge.org/action/displayFulltext?type=1&pdfType=1&fid=6614100&jid=CJG&volumeId=27&issueId=04&aid=6614092>

Keywords: aging, community support services, awareness, knowledge, acquiescence bias, vignette methodology

JEL Classification: I18

Where Would You Turn for Help? Older Adults' Awareness of Community Support Services*

M. Denton,¹⁻³ J. Ploeg,^{1,4} J. Tindale,⁵ B. Hutchison,⁶⁻⁸ K. Brazil,⁶ N. Akhtar-Danesh,⁴
M. Quinlan,⁹ J. Lillie,⁵ J. Millen Plenderleith,³ and L. Boos³

RÉSUMÉ

Les résultats précédents visant la sensibilisation des aînés aux services de soutien communautaires ne s'accordent pas et sont gâchés par l'acquiescence ou des allégations de partialité. Cela étant, la présente étude a utilisé une série de 12 scénarios pour décrire des situations courantes dans lesquelles se retrouvent les aînés pour qui des services de soutien communautaires seraient appropriés. Lors d'une entrevue téléphonique, nous avons lu à 1152 adultes âgés de 50 et plus une série de scénarios et nous leur avons demandé s'ils pouvaient indiquer un organisme communautaire vers lequel ils pourraient se tourner dans cette situation précise. Nous leur avons aussi interrogés sur leurs plus importantes sources de renseignements en matière de services de soutien communautaires. Les résultats indiquent que, si l'on a recours à une méthodologie par scénarios, la sensibilisation aux services de soutien communautaires était beaucoup plus faible qu'on ne l'avait d'abord pensé. Les plus importantes sources de renseignements sur les services de soutien communautaires comprenaient des sources de référence et des renseignements, l'annuaire téléphonique, les bureaux de médecins, et le bouche-à-oreille.

ABSTRACT

Previous findings on older adults' awareness of community support services (CSSs) have been inconsistent and marred by acquiescence or over-claiming bias. To address this issue, this study used a series of 12 vignettes to describe common situations faced by older adults for which CSSs might be appropriate. In telephone interviews, 1,152 adults aged 50 years and over were read a series of vignettes and asked if they were able to identify a community organization or agency that they may turn to in that situation. They were also asked about their most important sources of information about CSSs. The findings show that, using a vignette methodology, awareness of CSSs is much lower than previously thought. The most important sources of information about CSSs included information and referral sources, the telephone book, doctors' offices, and word of mouth.

¹ Department of Health, Aging and Society, McMaster University

² Department of Sociology, McMaster University

³ McMaster Centre for Gerontological Studies

⁴ School of Nursing, McMaster University

⁵ Department of Family Relations and Applied Nutrition, University of Guelph

⁶ Department of Clinical Epidemiology and Biostatistics, McMaster University

⁷ Department of Family Medicine, McMaster University

⁸ Centre for Health Economics and Policy Analysis, McMaster University

⁹ United Way of Burlington and Greater Hamilton

* The authors would like to thank the following organizations and their employees for the valuable contributions that they made in the development and analysis of this research: Catholic Family Services of Hamilton, Linda Dayler; Coalition of Community Health and Support Services, Lynne Edwards; Community Information Hamilton, Lesley Russell; Seniors Activation Maintenance Program, Lynne Edwards and Dave Banko; Grocer-Ease, Bev Morgan; Hamilton Community Care Access Centre, Sherry Parsley, Tom Peirce, and Dianne Thompson; Ontario Community Support Association (OCSA), Susan Thorning and Taru Virkamaki; Regional Geriatric Program (Central), David Jewell; Social Planning and Research Council of Hamilton (SPRC), Don Jaffray; United Way of Burlington and Greater Hamilton, Monica Quinlan.

This research was funded by the following organizations: Canadian Institutes of Health Research – Institute of Aging, Ontario Ministry of Health and Long-term Care, United Way of Burlington and Greater Hamilton, and Social Sciences and Humanities Research Council through funding of the Major Collaborative Research Initiatives (MCRI) (Socio-economic Dimensions of an Aging Population).

Manuscript received: / manuscrit reçu : 07/02/08

Manuscript accepted: / manuscrit accepté : 05/09/08

Mots clés : vieillissement, services de soutien communautaires, sensibilisation, connaissance, partialité, méthodologie par scénarios

Keywords: aging, community support services, awareness, knowledge, acquiescence bias, vignette methodology

Requests for offprints should be sent to: / Les demandes de tirés-à-part doivent être adressées à :

Dr. Margaret Denton

Director, McMaster Centre for Gerontological Studies

Professor, Department of Health, Aging and Society and Department of Sociology

McMaster University, KTH 226

1280 Main Street West

Hamilton, ON L8P 4M4

(mdenton@mcmaster.ca)

Many older adults experience a diminished ability to care for themselves and difficulty remaining independent in their own homes as they age. With the desire of older adults to age in place and the declining number and availability of children to provide care, Western industrial nations such as Canada have developed, in addition to home health services, a variety of community support services (CSSs) as an alternative to institutionalization. CSSs are delivered in the home or community to assist people coping with health or social problems to maintain the highest possible level of social functioning and quality of life. Examples of CSSs are food services, transportation services, day programs, volunteer visiting, and caregiver support services. CSSs, as defined here, do not include home health services.

Research shows that older adults have very low utilization rates of CSSs in Canada (Strain & Blandford, 2002). Access to CSSs is challenging because of a lack of awareness about CSSs, the multiplicity of small agencies providing community support, and the lack of a central access point. Furthermore, as the health care system becomes more complex, navigating the system becomes more difficult for older people, their families, and health care professionals.

Service awareness is an important topic because several studies have confirmed that lack of awareness of available services may lead to failure to recognize service needs or inability to access them (Benedito & Wister, 2005; Calsyn, Roades, & Klinkenberg, 1998; Cherry, 2002; Krout, 1985; Kushman & Freeman, 1986; Strain & Blandford, 2002; Wister, 1992). Furthermore, lack of awareness is a significant predictor of unmet need for services (Coulton & Frost, 1982). We currently lack valid and reliable information on older people's awareness of CSSs. Therefore, the purpose of this descriptive study was to measure older people's awareness of available CSSs and determine their sources of information about such services. In addition, this paper describes a methodology for gauging

service awareness using vignettes or scenarios that describe common situations faced by older adults for which CSSs might be appropriate.

Existing studies of service awareness show use of forced-choice checklists for gauging awareness of services. The results of these checklists are expressed as percentages and sometimes summed to form a measure of the extent of knowledge. A survey of the literature on older adults' awareness of CSSs reveals inconsistent findings in the proportion of respondents who were aware of various community support services (31–78 per cent) (Calsyn, Roades, & Calsyn, 1992; Calsyn & Winter, 1999a; Ward, Sherman, & LaGory, 1984; Wister, 1992). In addition, the proportion of respondents who were aware of CSSs varied by the type of community service (Calsyn & Roades, 1993; Calsyn et al., 1998; Calsyn & Winter, 1999a, 2000; Chapleski, 1989; Kushman & Freeman, 1986; Salvage, Jones, & Vetter, 1988). However, many of these studies have combined in-home and health services in their summary measures of CSSs (Calsyn & Winter, 2000; Krout, 1985; Wister, 1992). Canadian data are sparse: Edmonton seniors indicated awareness of 54.3 per cent of "ancillary health" agencies (Snider, 1980a, 1980b); Quebec seniors were aware of 47 per cent of health and social services (West, Delisle, Simard, & Drouin, 1996); Waterloo seniors were aware of 67 per cent of home support services (Wister, 1992).

Based on the literature on service awareness, it might be argued that older adults are reasonably well informed about CSSs. As we have seen, however, in most service awareness studies respondents have been provided with lists of services or agency names and asked to state whether they were aware of each one. As Calsyn and Winter (1996b) have demonstrated, this methodology leads to over-claiming or acquiescence bias (the tendency of respondents to answer the question positively regardless of the content). In several studies researchers have provided older adults with a fictitious service or agency name,

and found that 20–30 per cent of respondents reported familiarity with the fictitious service (Calsyn & Roades, 1993; Calsyn, Roades, & Calsyn, 1992).

To address acquiescence bias in studies of service awareness, Calsyn, Kelemen, Jones, and Winter (2001) have recommended several solutions: Adjust the service awareness scores of the acquiescers, delete the acquiescers from the analysis, provide a warning that fictitious agencies are embedded in the list of real agencies, or use open-ended questions to solicit the names or types of agencies. However, deleting respondents who over-claim from the analysis might serve further to bias the study, given that some groups may be more likely to over-claim than others, such as those with lower levels of education, higher age, or certain ethnic groups (Calsyn, Burger, & Roades, 1996; Calsyn & Roades, 1993; Calsyn et al., 1998; Calsyn & Winter, 1999b, 2000). Some researchers have used open-ended questioning to avoid acquiescence bias. In these studies, respondents have been required to state the name of an agency or service that might address a specific problem (Moon & Evans-Campbell, 1999) or provide specific information about a named service to substantiate the claim of service awareness (Snider, 1980a, 1980b).

Researchers have found that older adults obtain information about CSSs from: formal sources such as service providers and physicians; informal sources such as family members, friends, and relatives; media sources such as television and radio; and print media such as newspapers, brochures, and telephone book yellow pages (Ehrlich, Carlson, & Bailey, 2003; Feldman, Oberlink, Simantov, & Gursen, 2004; Goodman, 1992; Sherman, Ward, & LaGory, 1984; Wicks, 2004). There is inconsistency in the literature about older adults' preferred sources of information. Formal information sources (physicians and service agencies) have been found to be most important in two studies (Ehrlich et al., 2003; Feldman et al., 2004) and relatively unimportant in two others, which found news media to be most important (Goodman, 1992; Ward et al., 1984). Authors of three studies have reported that informal sources, such as friends and relatives, are the third most important information source (Ehrlich et al., 2003; Goodman, 1992; Ward et al., 1984).

A review of the literature indicates to us that the primary source of awareness is an important predictor of overall awareness of CSSs. Silverstein (1984) examined the relationship of knowledge source to consideration of service use. She found that the informal network was as effective as the media in terms of overall knowledge, and that both of these were more effective than formal sources of information.

In summary, it is difficult to draw firm conclusions from the research literature on the awareness of CSSs because of: acquiescence bias; inconsistent findings across studies; and aggregation of CSSs with other services, particularly health services. Furthermore, there has been little rigorous research on the awareness of CSSs among older adults in Canada. In addition, the literature on the most important sources of information about CSSs is inconclusive.

This paper addresses three research questions¹:

- 1 Do older people perceive a need for assistance when presented with a social or health problem for which CSSs might be appropriate?
- 2 Are older people aware of available CSSs?
- 3 Where do older people seek information about CSSs?

Method

Study Background

The issue of access to CSSs was identified as a research priority by community care agency representatives from Hamilton, Ontario, at two annual roundtable meetings. A working group of community care agency senior managers and front-line staff, representatives from planning agencies, and McMaster University researchers worked in partnership over a period of 18 months to define the research questions and develop the research methodology. Hamilton has a robust group of CSSs that work collaboratively (e.g., a coalition of non-profit CSSs meet monthly for planning purposes).

Based on population counts for census subdivisions in 2001, Hamilton was ranked the ninth largest city in Canada with a population of nearly 500,000 (Statistics Canada, 2001b). As a measure of the city's diversity, approximately one-quarter of the census metropolitan area of Hamilton is foreign-born (Statistics Canada, 2001c). This makes Hamilton the Canadian city with the third-highest proportion of foreign-born residents following Toronto (44%) and Vancouver (38%) (Statistics Canada, 2001c). Hamilton is an "aging" city; in 2001, 14.3 per cent of the Hamilton population was over the age of 65 years compared to Canada as a whole, which stood at 13 per cent (Statistics Canada, 2001a). Income levels are also slightly higher than in the rest of Canada.

Design and Procedure

We addressed the issue of acquiescence bias by using open-ended responses to vignettes or scenarios relevant to CSSs. The use of vignettes or scenarios is an established research methodology (Hughes & Huby, 2002; Spalding & Phillips, 2007; Urquhart, 1999); however, we found only one qualitative study that

has used vignette methodology to study older adults' awareness of formal services (Schoenberg & Ravdal, 2000). Vignettes are short descriptions of hypothetical situations that closely approximate real-life decision-making or judgment-making situations. Respondents are read the vignettes and asked to respond to the hypothetical situation. The advantage of vignettes is that they are interesting to the respondent, they provide context, they can be used to address sensitive topics, and they depersonalize problems. They also avoid investigator bias, whereby the list of services is bounded by the investigators' awareness of services available.

To develop the vignettes used for this study, front-line service providers developed a series of 34 vignettes to describe realistic and familiar situations faced by older adults for which CSSs might be appropriate. After two pre-tests we reduced the set of vignettes to 12, which covered a broad range of CSSs available in the community. The vignettes have high face and content validity as they were developed by CSS providers and present common problems experienced by older adults. The pre-tests provided evidence that respondents were able to answer questions about four

vignettes in an interview lasting approximately 25 minutes in length. The vignettes used in this study are found in Table 1.

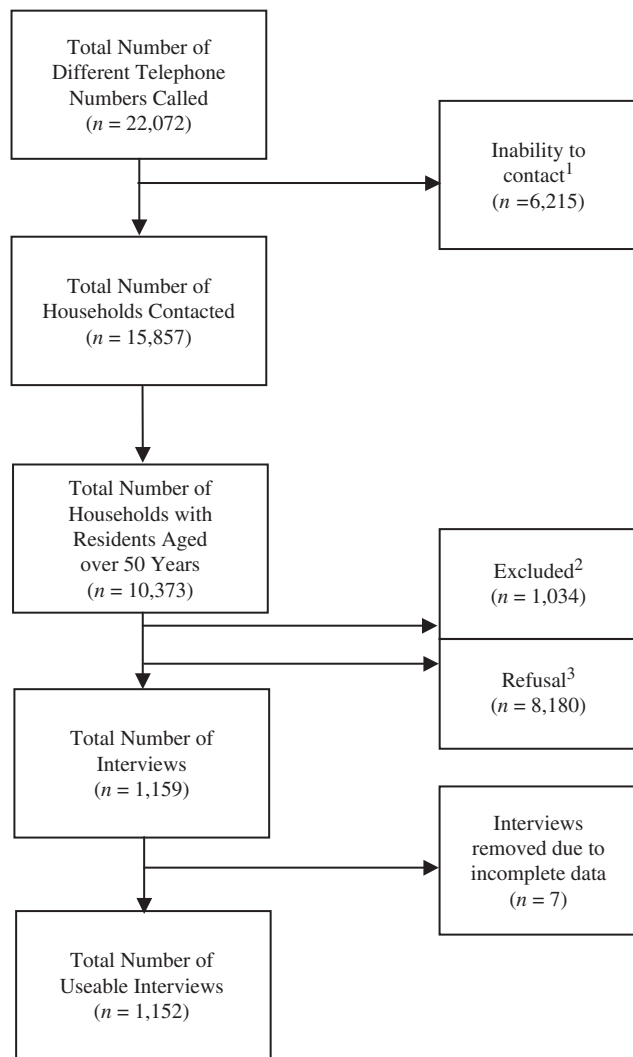
Each vignette was meant to measure the awareness of CSSs relevant to one type of problem based on a "Yes" and "No" variable. Sample size was calculated to provide an estimation of the proportion of "Yes" for each vignette with a confidence interval of 95 per cent and maximum error of 0.05. Based on these criteria, a sample size of 384 was needed for each vignette. The 12 vignettes were divided into three groups, each containing four vignettes. With this design we estimated a total sample size of $3 \times 384 = 1,152$ for this study.

Awareness of CSSs was measured through a telephone survey of older adults in Hamilton. We contracted with a survey firm to complete the telephone interviews using their Computer-Assisted Dialing Information (CADI) system. Telephone interviews ($n = 1,152$) were completed in English within a six-week period beginning mid-February 2006. Residents aged 50 years and older were invited to participate in the study. We included middle-aged residents in the study for three reasons. First, it has

Table 1: Vignettes

Vignette Number	Panel	Vignette Title	Vignette
1	A	Grief Recovery	Your spouse died two years ago. You spend a lot of time watching game shows and soap operas. Your family expects you to get on with life. You wish you had someone to talk to.
2	A	Financial Insecurity	You are 72 years old, and your retirement savings are gone. You can't afford to live on your Old Age Security and Canada Pension Plan.
3	A	Parental Dementia	You are the main caregiver for your parent who has Alzheimer's disease. You have discovered that your mother has been taking more pills than she should.
4	A	Supporting Your Parents	The health of your parents is rapidly deteriorating. They are no longer able to cook, clean, or buy groceries. They want to stay in their own home.
5	B	Caregiver Burden	You are an only child of a parent with Alzheimer's disease. For years you have been bringing him meals, doing his laundry, and paying his bills. Your spouse is sick and now you have to help him/her too. You are feeling overwhelmed and frustrated.
6	B	Financial Abuse	Your son handles your banking and monitors your investments, since you are unable to leave the house. A recent bank statement shows a lot less money than you think should be there. You think your son is taking your retirement savings.
7	B	Leisure	You are single and recently retired. You have never had time to pursue any leisure activities. You are having trouble filling your time.
8	B	Chronic Disease and Safety	You have severe arthritis in your back and knees. You fell last week.
9	C	Caregiver Respite	Your mother, who lives with you, is very confused and can't be left alone. You want to keep her at home, but you have to go to work. The rest of the family are working and cannot help.
10	C	Maintaining Your Independence	You have poor health and are no longer able to do your shopping, housework, or yard work. Your family members are busy and you don't want to bother them.
11	C	Transportation	You have to go for chemotherapy at the hospital several times per week. Your family and friends are unable to help you. You cannot afford to take a taxi and are too weak to take public transit.
12	C	Spousal Alcohol Abuse	Your spouse has been retired for about a year. He/she has started to drink heavily.

been well established that many middle-aged adults provide social support and care to their parents (Denton, 1997). Second, researchers have found that family members are an important source of information about CSSs (Goodman, 1992). Third, many middle-aged adults can be expected to need CSSs in the relatively near future. Therefore, it is important to know the level of awareness of CSSs held by middle-aged as well as older adults. The sample was obtained by randomly selecting telephone numbers from a list of telephone numbers for all residents in the City of Hamilton. Figure 1 illustrates that the



1 Inability to contact due to the following reasons: Not in service, fax/modem, business number, busy, answering machine, no answer, and unresolved.
 2 Excluded from total asked includes: language, illness/incapable.
 3 Refusals include: household refusals, mid-survey refusal, respondent refusal.

Figure 1: Flow chart of response rates for telephone survey

response rate was 12.4 per cent (1,159/9,339) of eligible households that completed an interview.

Participants were each read one of three panels of four vignettes and asked to imagine themselves in the situation described in the vignettes. During the interview, people were asked: "If you were in this situation, what would you do?" and further, "Can you name an organization or program in our community that you would turn to in that situation?" As part of the telephone survey, we also collected demographic (i.e., age, gender, marital status, education, country of birth), economic (i.e., income), health (i.e., self-rated health, activity limitation), and social (i.e., social support, membership in voluntary organizations or associations) data about participants. Ethics approval was obtained through the McMaster University Research Ethics Board.

Interviewers were instructed to enter the responses as to what participants would do in the situations described in the vignettes as verbatim responses. These responses were then coded by the survey firm's coders, working in concert with the researchers, into 150 different types of responses. The data were provided to the researchers in the form of an SPSS file. These were re-coded into 20 meaningful categories for the purpose of analysis (see Table 2). This process was carried out by the authors in concert with several rounds of peer checking among our community partners until we had consensus that the reduction from 150 to 20 categories was meaningful and accurate.

Recognizing that reliance on being able to respond in English may have been a problem for our telephone

Table 2: Categories of participant responses to vignettes

- 1 Community support services
- 2 Spouse
- 3 Son/daughter
- 4 Friends and neighbours
- 5 Relatives
- 6 Physician
- 7 Emergency
- 8 Clinics/hospitals
- 9 Other health professionals
- 10 Non-health professionals
- 11 Pastor/clergy/faith community
- 12 Social and recreation services
- 13 Nothing
- 14 Home health services
- 15 Long-term care/residential care
- 16 Self-help/personal strategy
- 17 Government
- 18 Information and referral services
- 19 Disease-specific agencies
- 20 Community Care Access Centre (CCAC)

survey, we also conducted five focus groups with Spanish (2 groups), Arabic, Vietnamese, and Caribbean immigrants to learn about their awareness of CSSs. Participants in the focus groups had very little awareness of CSSs (with the exception of the Caribbean immigrants). Responding to the vignette scenarios, most focus-group participants acknowledged that they would rely on their family or faith groups. These results will be reported in detail elsewhere.

Results

The study participants represented a wide cross-section of older adults in Hamilton. Tables 3 and 4 present the demographic profile of the study respondents. These tables show that over two-thirds of study participants were female (71%). In terms of age, 61 per cent were over the age of 60 years. Most (63%) participants were married or in a common-law relationship, with 19 per cent being widowed, 12 per cent divorced or separated, and 6 per cent single or never married. Household income varied across four categories, with the most frequent category (39%) being \$60,001 or over. In terms of education, about half of study participants had high-school education or less (46%), 25 per cent had a trade, non-university certificate or community college, and 27 per cent had university education. Over half of the study participants (54%) rated their health as very good or excellent, 28 per cent rated it as good and 15 per cent rated it as fair or poor. Most participants were born in Canada (71%). Comparisons to data on

Hamilton from the Canadian Census show that our sample is disproportionately female, Canadian born, and has English as a first language. More respondents have higher levels of education than is true for residents of Hamilton.

After being read each vignette, participants were asked, "If you were in this situation, what would you do?" As shown in Figure 2, while this varied by vignette, approximately 93 per cent said that they would seek some kind of help. We prompted with "Anything else?" up to four times for this question, in order to establish multiple sources of assistance. As noted previously, 20 types of help were named by participants, including self help, assistance from family and friends, physicians, CSSs, and pastors/clergy.

We addressed the question of to what extent older people are aware of available CSSs in two ways. We calculated the percentage of study participants who identified a CSS as their first response. If the study participant did not name a CSS to this first question, we further asked, "Can you name an organization or program in our community that you would turn to in that situation?" Again we used up to four prompts until a CSS was named. The percentage of respondents who answered a CSS at any point during the two questions was then calculated. These results are shown in Figure 3.

There is a distinction in the literature between service awareness and knowledge. Awareness is a general understanding that a service exists, but no specific

Table 3: Basic demographics of the sample^a

Demographic Variable	Males, Aged over 50 Years		Females, Aged over 50 Years		Combined Total, Aged over 50 Years (Males + Females)	
	Sample Percentage (n = 331)	Hamilton Population Percentage (n = 106,160)	Sample Percentage (n = 821)	Hamilton Population Percentage (n = 125,575)	Sample Percentage (n = 1,152)	Hamilton Population Percentage (n = 231,750)
Age						
50-54	19.6	22.4	20.3	20.2	20.1	21.2
55-59	21.1	20.1	18.0	18.2	18.9	19.0
60-64	17.2	15.5	17.7	14.0	17.5	14.7
65-69	13.0	12.3	13.2	11.6	13.1	11.9
70-74	10.0	10.7	10.2	10.7	10.2	10.7
75-79	9.7	9.1	12.3	10.1	11.5	9.6
80-84	4.8	6.2	5.2	8.4	5.1	7.4
85 or over	4.5	3.7	3.0	6.8	3.5	5.4
Total	100.0	100.0	100.0	100.0	100.0	100.0
Sex						
Male	-	-	-	-	28.7	45.8
Female	-	-	-	-	71.3	54.2

^a Comparisons made with available 2006 census data from Statistics Canada

Table 4: Basic demographics of the sample^a

Demographic Variable	Males, Aged over 50 Years		Females, Aged over 50 Years		Combined Total, Aged over 50 Years (Males + Females)	
	Sample Percentage (n = 331)	Hamilton Population Percentage (n = 90,817)	Sample Percentage (n = 821)	Hamilton Population Percentage (n = 104,795)	Sample Percentage (n = 1,152)	Hamilton Population Percentage (n = 195,612)
Education						
Less than High School	3.9	17.2	5.4	18.9	4.9	18.1
Some – All of High School	41.7	31.7	41.5	42.0	41.6	37.2
Trades, Non-University Certificate, Community College	21.5	28.3	26.7	24.4	25.2	26.2
University or Higher	31.4	22.9	25.8	14.8	27.4	18.5
Country of Birth						
Born in Canada	71.6	59.4	71.3	58.0	71.4	58.7
Foreign Born	27.5	40.6	27.9	42.0	27.8	41.3
Language						
English	94.3	84.9	94.8	84.3	94.6	84.6
French	0.9	0.6	0.5	0.6	0.6	0.6
Other	4.8	14.5	4.8	15.1	4.8	14.8
Marital Status						
Married, Common-Law	71.6	76.9	59.6	58.0	63.1	66.8
Widowed	12.4	6.5	21.9	25.4	19.2	16.7
Divorced, Separated	10.3	10.7	12.1	12.3	11.6	11.5
Single, Never Married	5.7	5.9	6.3	4.3	6.5	5.0
Household Income (\$) ^b						
\$20,000 or less	11.2	7.9	16.7	16.9	15.0	12.7
\$20,001–40,000	26.6	23.1	28.1	25.0	27.6	24.1
\$40,001–60,000	16.5	19.1	19.6	18.6	18.6	18.9
\$60,001 or over	45.7	49.7	35.6	39.3	38.7	44.2
Self-Reported Health						
Excellent	20.6	–	21.1	–	20.9	–
Very Good	34.2	–	33.0	–	33.3	–
Good	25.7	–	29.1	–	28.1	–
Fair	13.0	–	12.5	–	12.7	–
Poor	6.4	–	3.8	–	4.5	–

^a Comparisons made with 2001 census data from Statistics Canada (2006 data unavailable at time of creation).

^b The number of study responses to the household-income question were 278 (males), 634 (females), 912 (both males and females).

information that would be needed to access a service. Knowledge is knowing the name of an agency or program, how to contact it, or where it is located (Krout, 1985; Kushman & Freeman, 1986). Of those participants identifying a CSS in this study, the vast majority were able to name an agency. A minority were only able to identify a type of service. Both response types are included in our measure of awareness of CSS.

Furthermore, respondents may be able to name an agency, but it *could be* the wrong agency for the task at issue. This in fact was the case for a small minority of participants. This issue was discussed with our advisory committee of community service providers and we reasoned that if a call was made to any CSS, even one that did not provide the relevant service,

then it was likely that a referral would be made to the appropriate service provider, resulting in access to services.

The bottom section of each bar on the graph in Figure 3 shows the percentage of respondents who named a CSS as their first response to the question “What would you do?” in response to the situation described by the vignette. The top or lighter section of each bar shows the percentage of respondents who named a CSS at any later point during the questioning about the vignette. Awareness of CSSs was limited and varied by the situation described, and ranged from a low of one per cent to a high of 41 per cent, with an average of 21 per cent. Respondents were most likely to be aware of services to assist with caregiver burden and transportation services.

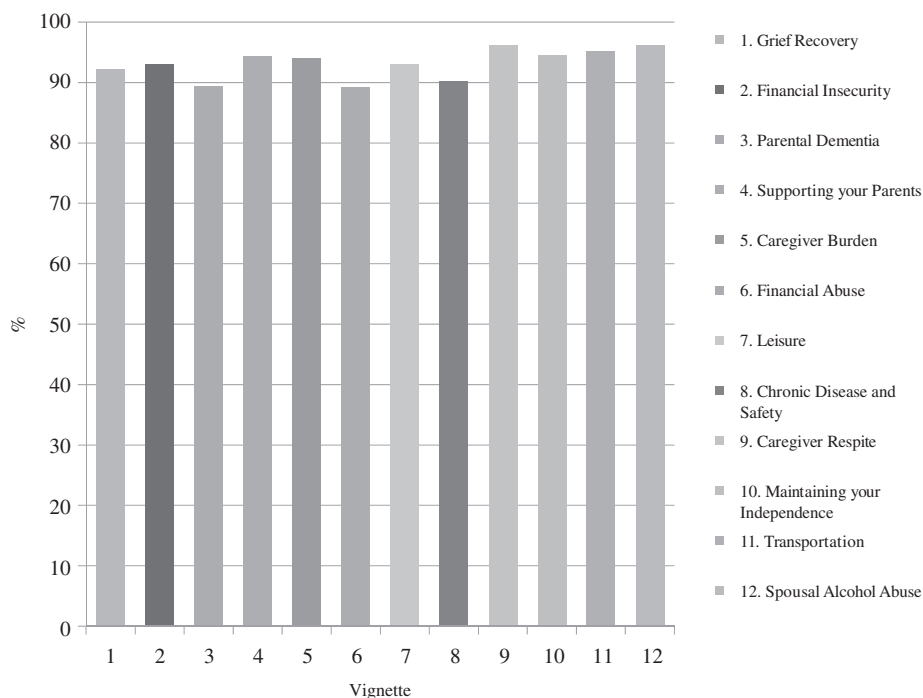


Figure 2: Percentage of respondents who would seek help by vignette; (N=384 for each vignette)

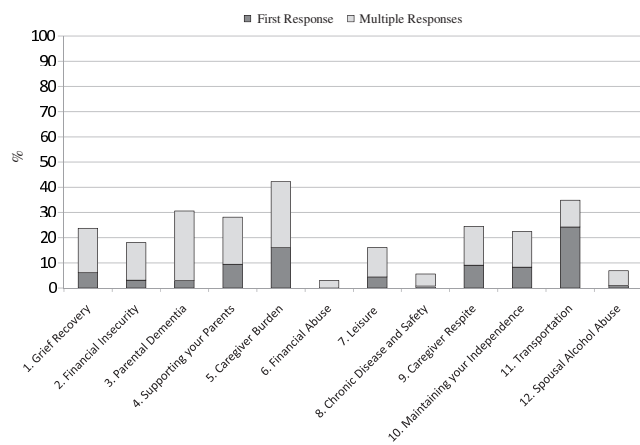


Figure 3: Percentage of respondents who answered CSSs by vignette by first and multiple responses (N=384 for each vignette)

Awareness was also higher for CSSs providing assistance with parental dementia, supporting parents, grief recovery, maintaining independence, and financial insecurity. There was very little awareness of CSSs available to assist people with finding leisure activities, spousal alcohol abuse, chronic disease and safety, and financial abuse.

Overall, 86 per cent were able to provide information on where they would seek information about CSSs. As shown in Figure 4, about one-quarter of older

people would seek information about CSSs from information and referral services, the telephone book, a doctor’s office, and from informal sources such as discussions with friends, neighbours, and family members. One-sixth would seek information on the Internet. Less frequently mentioned sources of information (5–10%) included social and recreation centres, hospitals and clinics, and the Community Care Access Centre (CCAC)—a one-stop access centre for home health care services that also offers information and referral services.

Discussion

This study’s results make an important contribution to the literature on older people’s awareness of CSSs. Most studies on service awareness are more than a decade old and combine CSSs and health services (Calsyn & Roades, 1993; Calsyn et al., 1998; Calsyn & Winter, 1999a; Chapleski, 1989; Kushman & Freeman, 1986; Salvage et al., 1988), whereas we focused only on CSSs. Furthermore, there are very few Canadian studies on service awareness (Snider, 1980a, 1980b; Wister, 1992). Most literature focuses on service utilization, although two studies have included service awareness as a determinant of service use (Strain & Blandford, 2002; Wister, 1992).

By using a vignette methodology, over-claiming or acquiescence bias was avoided. The percentage of participants with awareness of CSSs ranged from one

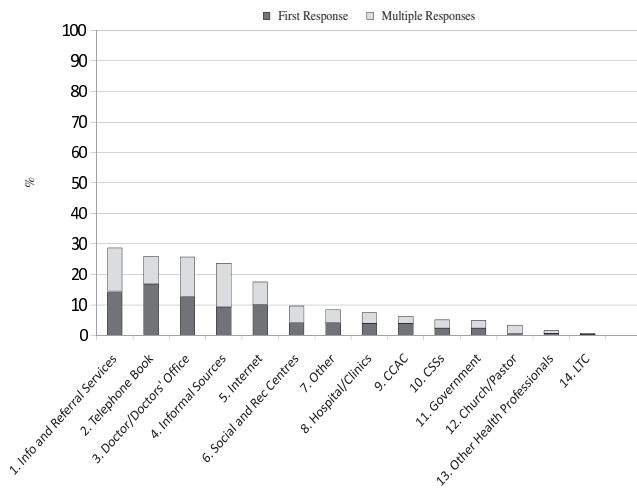


Figure 4: Sources of information about CSSs; first response and multiple responses

Note: *Information and Referral Services* includes Newspaper/TV/Radio/Magazines/Media/Mail/The Red Book (directory of services)/Library/University and College; *Informal Sources* includes Friends/Neighbours/Work-related friends/Mother/Daughter-Son-In-Law/Word of Mouth/Other Undefined Relative/Daughter/Child/Mother-Father-Parent-In-Law/Spouse/Son/Sister/Sister-Brother-In-Law/Father

to 41 per cent, depending on the type of situation described. The proportion of older adults found to be aware of CSSs was much lower than the findings of many other studies, many of which suffered from acquiescence bias (Calsyn & Roades, 1993; Calsyn et al., 1998; Calsyn & Winter, 1999b, 2000; Chapleski, 1989; Kushman & Freeman, 1986; Salvage et al., 1988; Wister, 1992).

The use of vignette methodology also served to decrease investigator bias, where the investigator checklist of services is limited by his/her breadth of awareness. The vignettes were developed from hypothetical but realistic and relevant situations by expert practitioners (Urquhart, 1999), thus providing high face and content validity to the findings. Participants enjoyed the depersonalized vignette format, which encouraged them to think beyond their own situations. Some of the topics were sensitive (e.g., financial abuse, alcohol abuse) and we were able to ask these questions in a non-threatening way (Schoenberg & Ravdal, 2000).

Consistent with what we found in the literature (Calsyn & Roades, 1993; Calsyn et al., 1998; Calsyn & Winter, 1999a, 2000; Chapleski, 1989; Kushman & Freeman, 1986; Salvage et al., 1988), we found that the level of awareness about CSSs varied by the type of service. Participants were most likely to

be aware of transportation services, services for older people with dementia, and home support services. There was very little awareness of CSSs that are available to assist people who are socially isolated and lonely, who are having financial difficulties, or who suffer from financial or alcohol abuse.

Researchers indicate that older adults wish to “age in place” (Chappell, McDonald, & Stones, 2008). If they are to maintain their independence and live in their own homes for as long as possible then it is imperative that they have awareness about the services that are available to assist them with health or social problems. Our study findings showed that participants are most likely to use an indirect route to seek information about CSSs, including the telephone book, information and referral services (including newspapers, media, and the library), doctors and doctors’ offices, informal sources of information (i.e., family, friends, and neighbours), the Internet, and various other sources. These findings are consistent with other research that found formal information sources (e.g., physicians and service agencies) to be important (Ehrlich et al., 2003; Feldman et al., 2004), as well as research that found media to be important information sources (Goodman, 1992; Ward et al., 1984). Only about 10 per cent of participants indicated that they would obtain information about CSSs from the CCAC, a one-stop access centre for provincially funded in-home health and personal care supports, as well as information and referral services.

While the telephone book was the most frequently mentioned source of information about CSSs, an examination of seniors’ services in the *Yellow Pages* revealed that only a very few CSSs were listed, and that the local CCAC did not list its phone number under that section in the *Yellow Pages* nor under “seniors” in the blue pages (government pages). While doctors’ offices were identified as an important source of information about CSSs, physicians are generally not knowledgeable about CSSs (Fortinsky, 1998; Henninger, Henninger, Morse, & Zweigenhaft, 1986).

The results of this study are limited by several factors. First, using a random telephone survey technique resulted in a low response rate, as has been demonstrated in other studies of access to services (Calsyn & Winter, 2000). Agreement to participate in a telephone interview is getting more and more difficult to achieve with the constant barrage of telemarketing and the use of caller ID and telephone-answering services. While there was a wide range of participants, the sample was over-represented by participants who were female, had English as a first language, were

Canadian-born, and had higher levels of education. Given that research has shown that women and those with higher levels of education have higher levels of service awareness (Calsyn & Roades, 1993; Calsyn et al., 1998), we speculate that the levels of awareness of CSSs found in this study are in fact inflated. Furthermore, access to services may be further complicated for those whose language is other than English or French, since most services are accessible in only the two official languages. Despite study limitations, findings do show that there is an unmet need for CSSs as suggested by our findings of high levels of perceived need, but low levels of awareness of available CSSs. Lack of awareness of CSSs is a serious problem that needs to be addressed so that older adults may utilize the CSSs available to assist them. If awareness of CSSs increased significantly among older adults there would, however, be a corresponding need for additional capacity in CSSs.

The findings presented here are descriptive, indicating the level of awareness for CSSs. Further investigation into the social determinants of awareness of CSSs is merited. In addition, more detailed analysis of where people with specific problems – such as coping with dementia, financial difficulties, maintaining independence, and substance abuse – turn to for help needs to be done. Many respondents indicated that they would turn to their family physician for information about where to seek assistance. Research that documents the knowledge of CSSs held by physicians or the staff in their offices and their referral patterns would also be beneficial in order to target knowledge dissemination strategies.

While this research was set in the City of Hamilton, accessibility to services is an issue of concern across the province and, indeed, across Canada, since knowledge of CSSs is key to utilization of services. The results of this research can inform policy at all levels of government and will help agencies to identify targets for service awareness and education strategies. In terms of policy and practice issues, awareness-translation activities need to be implemented to increase the level of awareness among older adults and their caregivers regarding the CSSs available to assist older adults with health and social problems. In particular, awareness of services to assist people who are socially isolated and lonely, who are having financial difficulties, or who suffer from financial or alcohol abuse should be targeted.

Some communities in Ontario are introducing 211 as a telephone information service, and this may be a promising solution to the lack of awareness of CSSs (www.211canada.ca). Furthermore, there may be a role for social workers, care managers, or nurse

practitioners in community health practices in making referrals or providing information about CSSs to patients. Since many older adults would seek assistance from their informal networks, strengthening informal networks is an important strategy to improve access to services. This may include workshops for or presentations to middle-aged adults, seminars through places of employment, and developing interactive Internet sites. There are also opportunities to link information to activities that are frequented by seniors (e.g., in senior centres and community health centres). Many immigrants have low incomes and many do not speak English. Settlement services are a magnet for recent immigrants and provide access to the social networks of immigrant communities. Information about CSSs could be presented through pamphlets and informal meetings in the languages of the different immigrant groups (Lillie, 2008).

Note

- 1 This is an initial study in a planned program of research dealing with access to CSSs. In a subsequent paper, we will examine the demographic, personal, and social characteristics that are associated with awareness of and information sources for CSSs.

References

- Benedito, C., & Wister, A. (2005). From cues to action: Information seeking and exercise self-care among older adults managing chronic illness. *Canadian Journal on Aging, 24*(4), 395–408.
- Calsyn, R.J., Burger, G.K., & Roades, L. (1996). Cross-validation of differences between users and non-users of senior centres. *Journal of Social Service Research, 21*(3), 39–56.
- Calsyn, R.J., Kelemen, W.L., Jones, T., & Winter, J.P. (2001). Reducing over-claiming in needs assessment studies: An experimental comparison. *Evaluation Review, 25*(6), 583–604.
- Calsyn, R.J., & Roades, L.A. (1993). Predicting perceived service need, service awareness, and service utilization. *Journal of Gerontological Social Work, 21*(1/2), 59–76.
- Calsyn, R.J., Roades, L.A., & Calsyn, D.S. (1992). Acquiescence in needs assessment studies of the elderly. *Gerontologist, 32*(2), 246–52.
- Calsyn, R., Roades, L.A., & Klinkenberg, W.D. (1998). Using theory to design needs assessment studies of the elderly. *Evaluation and Programming Planning, 21*(3), 277–286.
- Calsyn, R.J., & Winter, J.P. (1999a). Predicting specific service awareness dimensions. *Research On Aging, 21*(6), 762–780.

- Calsyn, R.J., & Winter, J.P. (1999b). Understanding and controlling response bias in needs assessment studies. *Evaluation Review*, 23(4), 399–417.
- Calsyn, R.J., & Winter, J.P. (2000). Predicting different types of service use by the elderly: The strength of the behavioral model and the value of interaction terms. *Journal of Applied Gerontology*, 19(3), 284–303.
- Chapleski, E.E. (1989). Determinants of knowledge of services to the elderly: Are strong ties enabling or inhibiting. *Gerontologist*, 29(4), 539–545.
- Chappell, N., McDonald, L., & Stones, M. (2008). *Aging in contemporary Canada* (2nd ed., p. 230). Toronto: Pearson Education Canada.
- Cherry, R. (2002). Who uses service directories? Extending the behavioral model to information use by older people. *Research On Aging*, 24(5), 548–574.
- Coulton, C., & Frost, A.K. (1982). Use of social and health services by the elderly. *Journal of Health and Social Behavior*, 23(4), 330–339.
- Denton, M. (1997). The linkages between informal and formal care of the elderly. *Canadian Journal on Aging*, 16(1), 17–37.
- Ehrlich, N.J., Carlson, D., & Bailey, N. (2003). Sources of information about how to obtain assistive technology: Findings from a national survey of persons with disabilities. *Assistive Technology*, 15(1), 28–38.
- Feldman, P.H., Oberlink, M.R., Simantov, E., & Gursen, M.D. (2004). A tale of two older Americas: Community opportunities and challenges. AdvantAge initiative: 2003 national survey of adults aged 65 and older. New York, NY: Center for Home Care Policy and Research. Retrieved 13 Dec. 2008 from http://www.vnsny.org/advantage/AI_NationalSurveyReport.pdf.
- Fortinsky, R.H. (1998). How linked are physicians to community support services for their patients with dementia? *Journal of Applied Gerontology*, 17(4), 480–498.
- Goodman, I.R. (1992). The selection of communication channels by the elderly to obtain information. *Educational Gerontology*, 18(7), 701–714.
- Henninger, J.L., Henninger, W.B., Morse, C.K., & Zweigenhaft, R.L. (1986). Physicians' awareness of services for the elderly. *Gerontology & Geriatrics Education*, 7(2), 21–28.
- Hughes, R., & Huby, M. (2002). The application of vignettes in social and nursing research. *Journal of Advanced Nursing*, 37(4), 382–386.
- Krout, J.A. (1985). Service awareness among the elderly. *Journal of Gerontological Social Work*, 9(1), 7–19.
- Kushman, J.E., & Freeman, B.K. (1986). Service consciousness and service knowledge among older Americans. *International Journal of Aging and Human Development*, 23(3), 217–237.
- Lillie, J. (2008). *Older adults' knowledge of community support services: Does social support make a difference*. Unpublished doctoral dissertation. University of Guelph, Ontario, Canada.
- Moon, A., & Evans-Campbell, T. (1999). Awareness of formal and informal sources of help for victims of elder abuse among Korean American and Caucasian elders in Los Angeles. *Journal of Elder Abuse and Neglect*, 11(3), 1–23.
- Salvage, A.V., Jones, D.A., & Vetter, N.J. (1988). Awareness of and satisfaction with community services in a random sample of over 75s. *Health Trends*, 20(3), 88–92.
- Schoenberg, N.E., & Ravdal, H. (2000). Using vignettes in awareness and attitudinal research. *International Journal of Social Research Methodology*, 3(1), 63–74.
- Sherman, S., Ward, R.A., & LaGory, M. (1984). Higher education and peer socialization: A promising partnership. *Gerontology & Geriatrics Education*, 4(3), 15–21.
- Silverstein, N.M. (1984). Informing the elderly about public services: The relationship between sources of knowledge and service utilization. *Gerontologist*, 24(1), 37–40.
- Snider, E.L. (1980a). Awareness and use of health services by the elderly. *Medical Care*, 18(12), 1177–1182.
- Snider, E.L. (1980b). Factors influencing health service knowledge among the elderly. *Journal of Health and Social Behavior*, 21, 371–377.
- Spalding, N.J., & Phillips, T. (2007). Exploring the use of vignettes: From validity to trustworthiness. *Qualitative Health Research*, 17(7), 954–962.
- Statistics Canada (2001a). *Age and sex: Highlight tables, 2001 Census*. Retrieved 14 Dec. 2007 from <http://www12.statcan.ca/english/census01/products/highlight/AgeSex/HighlightsTables.cfm?Lang=E>.
- Statistics Canada (2001b). *Population and dwelling counts, for Canada and census subdivisions (municipalities), 2001 and 1996 Censuses – 100% data*. Retrieved 14 Dec. 2007 from <http://www12.statcan.ca/english/census01/products/standard/popdwell/Table-CSD-N.cfm?T=1&SR=1&S=3&O=D>.
- Statistics Canada (2001c). *Proportion of foreign-born population, by census metropolitan area (1991 to 2001 Censuses)*. Retrieved 14 Dec. 2007 from <http://www40.statcan.ca/101/cst01/dem047a.htm>.
- Strain, L., & Blandford, A. (2002). Community-based services for the taking but few takers: Reasons for nonuse. *Journal of Applied Gerontology*, 21(2), 220–235.
- Urquhart, C.J. (1999). Using vignettes to diagnose information seeking strategies: Opportunities and

possible problems for information use in studies of health professionals. In D. Thomas, & D.K. Wilson (Eds.), *Exploring the context of information behaviour. Proceedings of the second international conference on information needs, seeking and use in different contexts 1998* (pp. 277–289). London: Taylor Graham.

Ward, R.A., Sherman, S.R., & LaGory, M. (1984). Informal networks and knowledge of services for older persons. *Journal of Gerontology*, 39(2), 216–223.

West, G.E., Delisle, M.A., Simard, C., & Drouin, D. (1996). Leisure activities and service knowledge and use among the rural elderly. *Journal of Aging and Health*, 8(2), 254–279.

Wicks, D.A. (2004). Older adults and their information seeking. *Behavioral & Social Sciences Librarian*, 22(2), 1–26.

Wister, A. (1992). Residential attitudes and knowledge, use, and future use of home support agencies. *Journal of Applied Gerontology*, 11(1), 84–100.

QSEP RESEARCH REPORTS - Recent Releases

Number	Title	Author(s)
(2005)		
No. 393:	Where Have All The Home Care Workers Gone?	M. Denton I.S. Zeytinoglu S. Davies D. Hunter
No. 394:	Survey Results of the New Health Care Worker Study: Implications of Changing Employment Patterns	I.S. Zeytinoglu M. Denton S. Davies A. Baumann J. Blythe A. Higgins
No. 395:	Unexploited Connections Between Intra- and Inter- temporal Allocation	T.F. Crossley H.W. Low
No. 396:	Measurement Errors in Recall Food Expenditure Data	N. Ahmed M. Brzozowski T.F. Crossley
No. 397:	The Effect of Health Changes and Long-term Health on the Work Activity of Older Canadians	D.W.H. Au T.F. Crossley M. Schellhorn
No. 398:	Population Aging and the Macroeconomy: Explorations in the Use of Immigration as an Instrument of Control	F.T. Denton B.G. Spencer
No. 399:	Users and Suppliers of Physician Services: A Tale of Two Populations	F.T. Denton A. Gafni B.G. Spencer
No. 400:	MEDS-D Users' Manual	F.T. Denton C.H. Feaver B.G. Spencer
No. 401:	MEDS-E Users' Manual	F.T. Denton C.H. Feaver B.G. Spencer
No. 402:	Socioeconomic Influences on the Health of Older Canadians: Estimates Based on Two Longitudinal Surveys (Revised Version of No. 387)	N.J. Buckley F.T. Denton A.L. Robb B.G. Spencer
No. 403:	Population Aging in Canada: Software for Exploring the Implications for the Labour Force and the Productive Capacity of the Economy	F.T. Denton C.H. Feaver B.G. Spencer

QSEP RESEARCH REPORTS - Recent Releases

Number	Title	Author(s)
(2006)		
No. 404:	Joint Taxation and the Labour Supply of Married Women: Evidence from the Canadian Tax Reform of 1988	T.F. Crossley S.H.Jeon
No. 405:	The Long-Run Cost of Job Loss as Measured by Consumption Changes	M. Browning T.F. Crossley
No. 406:	Do the Rich Save More in Canada?	S. Alan K. Atalay T.F. Crossley
No. 407:	The Social Cost-of-Living: Welfare Foundations and Estimation	T.F. Crossley K. Pendakur
No. 408:	The Top Shares of Older Earners in Canada	M.R. Veall
No. 409:	Estimating a Collective Household Model with Survey Data on Financial Satisfaction	R. Alessie T.F. Crossley V.A. Hildebrand
No. 410:	Physician Labour Supply in Canada: a Cohort Analysis	T.F. Crossley J. Hurley S.H. Jeon
No. 411:	Well-Being Throughout the Senior Years: An Issues Paper on Key Events and Transitions in Later Life	M. Denton K. Kusch
No. 412:	Satisfied Workers, Retained Workers: Effects of Work and Work Environment on Homecare Workers' Job Satisfaction, Stress, Physical Health, and Retention	I.U. Zeytinoglu M. Denton
(2007)		
No. 413:	Gender Inequality in the Wealth of Older Canadians	M. Denton L. Boos
No. 414:	Which Canadian Seniors are Below the Low-Income Measure?	M. Veall
No. 415:	On the Sensitivity of Aggregate Productivity Growth Rates to Noisy Measurement	F.T. Denton
No. 416:	Initial Destination Choices of Skilled-worker Immigrants from South Asia to Canada: Assessment of the Relative Importance of Explanatory Factors	L. Xu K.L. Liaw
No. 417:	Problematic Post-Landing Interprovincial Migration of the Immigrants in Canada: From 1980-83 through 1992-95	K.L. Liaw L. Xu

QSEP RESEARCH REPORTS - Recent Releases

Number	Title	Author(s)
No. 418:	The Adequacy of Retirement Savings: Subjective Survey Reports by Retired Canadians	S. Alan K. Atalay T.F. Crossley
No. 419:	Ordinary Least Squares Bias and Bias Corrections for <i>iid</i> Samples	L. Magee
No. 420:	The Roles of Ethnicity and Language Acculturation in Determining the Interprovincial Migration Propensities in Canada: from the Late 1970s to the Late 1990s	X. Ma K.L. Liaw
No. 421:	A Note on Income Distribution and Growth	W. Scarth
No. 422:	Is Foreign-Owned Capital a Bad Thing to Tax?	W. Scarth
No. 423:	Looking for Private Information in Self-Assessed Health	J. Banks T. Crossley S. Goshev
No. 424:	An Evaluation of the Working Income Tax Benefit	W. Scarth L. Tang
No. 425:	Exploring the Effects of Aggregation Error in the Estimation of Consumer Demand Elasticities	F.T. Denton D.C. Mountain
(2008)		
No. 426:	An Application of Price and Quantity Indexes in the Analysis of Changes in Expenditures on Physician Services	F.T. Denton C.H. Feaver B.G. Spencer
No. 427:	What Is Retirement? A Review and Assessment of Alternative Concepts and Measures	F.T. Denton B.G. Spencer
No. 428:	Pension Benefit Insurance and Pension Plan Portfolio Choice	T. Crossley M. Jametti
(2009)		
No. 429:	Visiting and Office Home Care Workers' Occupational Health: An Analysis of Workplace Flexibility and Worker Insecurity Measures Associated with Emotional and Physical Health	I.U. Zeytinoglu M. Denton S. Davies M.B. Seaton J. Millen

QSEP RESEARCH REPORTS - Recent Releases

Number	Title	Author(s)
No. 430:	Where Would You Turn For Help? Older Adults' Knowledge and Awareness of Community Support Services	M. Denton J. Ploeg J. Tindale B. Hutchison K. Brazil N. Akhtar-Danesh M. Quinlan
No. 431:	New Evidence on Taxes and Portfolio Choice	S. Alan K. Atalay T.F. Crossley S.H. Jeon
No. 432:	Cohort Working Life Tables for Older Canadians	F.T. Denton C.H. Feaver B.G. Spencer
No. 433:	Population Aging, Older Workers, and Canada's Labour Force	F.T. Denton B.G. Spencer
No. 434:	Patterns of Retirement as Reflected in Income Tax Records for Older Workers	F.T. Denton R. Finnie B.G. Spencer
No. 435:	Chronic Health Conditions: Changing Prevalence in an Aging Population and Some Implications for the Delivery of Health Care Services	F.T. Denton B.G. Spencer
No. 436:	Income Replacement in Retirement: Longitudinal Evidence from Income Tax Records	F.T. Denton R. Finnie B.G. Spencer
(2010)		
No. 437:	Understanding the Outcomes of Older Job Losers	M. Brzozowski T.F. Crossley
No. 438:	Employer Pension Plan Inequality in Canada	M. Denton J. Plenderleith
No. 439:	Retirement Decisions of People with Disabilities: Voluntary or Involuntary	M. Denton J. Plenderleith J. Chowhan

QSEP RESEARCH REPORTS - Recent Releases

Number	Title	Author(s)
No. 440:	Where Would You Turn for Help? Older Adults' Awareness of Community Support Services	M. Denton J. Ploeg J. Tinsdale B. Hutchison K. Brazil N. Akhtar-Danesh M. Quinlan J. Lillie J. Millen Plenderleith L. Boos