

Characterizing Social and Recreational Programming in Assisted Living*

Heather M. Hanson,^{1,2,3} Christiane A. Hoppmann,^{1,4} Karen Condon,⁵ Jane Davis,⁶ Fabio Feldman,^{6,7} Mavis Friesen,⁵ Pet Ming Leung,⁶ Angela D. White,^{1,2,3} Joanie Sims-Gould,^{1,2} and Maureen C. Ashe^{1,2,3}

RÉSUMÉ

Les objectifs de cette étude en trois phases étaient (1) de caractériser les opportunités existantes dans les programmes de loisirs pour les locataires résidant avec aide à la vie autonome (AVA)* et (2) de recueillir les perceptions sur les facteurs qui influent sur la planification et la prestation des programmes. Au cours d'une collaboration d'un an, nous avons utilisé un cadre de l'application des connaissances intégrées qui a ciblé 51 sites AVA subventionnés par l'État de deux autorités de la santé en Colombie-Britannique. Nous avons effectué une revue des activités, une enquête auprès du personnel et des symposia interactifs pour identifier les facteurs qui ont permis ou restreint les programmes de loisirs. D'après les informations obtenues, nous avons déterminé que tous les sites AVA livraient programmes de loisirs. Bien que les possibilités d'exercice et de l'activité physique ont été perçus comme ayant une grande importance, la plupart des activités étaient de nature sociale. Le personnel a signalé leur confiance dans la prestation de ce type de programmation et a estimé qu'il répondait aux besoins holistiques des locataires, y compris leur bien-être mental, favorisant un sentiment d'appartenance à la communauté. Futures pistes pour augmenter l'activité physique pour les locataires AVA devraient aborder les caractéristiques de l'individu, du site, et de l'organisation.

ABSTRACT

The objectives of this three-phased investigation were to (1) characterize existing recreational programming opportunities for tenants residing in assisted living (AL) and (2) gather perceptions on factors influencing activity program planning and delivery. Using an integrated knowledge translation framework during a one-year collaboration, we targeted 51 publicly funded AL sites from two health authorities in British Columbia. We conducted an activity calendar review, staff survey, and interactive symposia to identify factors that enabled or restricted recreational programming. From the information obtained, we determined that all AL sites delivered recreational programming. Although exercise and physical activity opportunities were perceived as having high importance, most activities were social. Staff reported confidence in delivering this type of programming and believed it met the holistic needs of tenants, including their mental well-being, and fostered a sense of community. Future avenues for increasing physical activity of AL tenants should address individual, site, and organizational characteristics.

¹ Centre for Hip Health and Mobility

² Vancouver Coastal Health Research Institute

³ Department of Family Practice, University of British Columbia

⁴ Department of Psychology, University of British Columbia

⁵ Vancouver Coastal Health Authority

⁶ Fraser Health Authority

⁷ Department of Biomedical Physiology and Kinesiology, Simon Fraser University

* We gratefully acknowledge the contribution of our study participants. This work was supported by a grant from the Canadian Institutes of Health Research (FRN 114494). We also acknowledge career award support for Maureen Ashe from CIHR and the Michael Smith Foundation for Health Research (MSFHR), and career award support for Christiane Hoppmann from MSFHR and Canada Research Chairs Program.

Manuscript received: / manuscrit reçu : 04/05/13

Manuscript accepted: / manuscrit accepté : 06/01/14

Mots clés : vieillissement, aide à la vie autonome, mobilité, aînés, activité physique, environnement social

Keywords: aging, assisted living, mobility, older adults, physical activity, social environment

La correspondance et les demandes de tirés-à-part doivent être adressées à: / Correspondence and requests for offprints should be sent to:

Maureen C. Ashe, P.T., Ph.D.
Center for Hip Health and Mobility
7/F 2635 Laurel St.
Vancouver, BC V5Z 1M9
(Maureen.Ashe@ubc.ca)

Introduction

With the projected growth in the number of older adults over the next few decades, accommodation options that bridge the needs of individuals between independent living and residential care will be in demand. Community-based accommodations that support individuals as they age can preserve autonomy and independence, and for some individuals may possibly replace the need for residential care (Darton et al., 2012). Providing an enjoyable community environment in these varied accommodation options will ensure the maintenance of a high quality of life for individuals residing in them (Mitchell & Kemp, 2000). In Canada, assisted living (AL) offers a community-based, semi-independent housing option for older adults with the central philosophy being to enable individuals to remain self-reliant and engaged in the broader community by providing the minimal level of assistance necessary. AL is based on a social model that emphasizes autonomy: it offers hospitality services plus personal assistance for adults who can direct their own care but require regular help with some activities of daily living, such as assistance with medication management (Lieto & Schmidt, 2005).

In British Columbia, there are approximately 200 registered AL residences consisting of more than 6,800 suites, of which about 64 per cent are publicly subsidized (British Columbia Ombudsperson, 2012). British Columbia has legislation specific to AL, including a mandate for the provision of “social and recreational opportunities for tenants” (Province of British Columbia Ministry of Attorney General, 2002). AL sites vary in the recreational programming options offered, but can include activities such as social events, exercise classes, or off-site outings. Although British Columbia is the first Canadian province to mandate the requirement, social and recreational programming is utilized by AL sites throughout Canada and in other countries to foster an enjoyable community environment and to maintain a high quality of life for tenants (Mitchell & Kemp, 2000). Therefore, regardless of geographical boundaries, social and recreational opportunities may be determining factors that facilitate an older adult’s socialization in an AL community, and an important opportunity for physical activity.

Research evidence supports the role of physical activity in healthy aging. Hatch and Lusardi (2010), for example, found that exercise can be effective in an AL setting, resulting in positive outcomes such as preservation of functional status and fewer falls. Furthermore, exercise can be an effective intervention for older adults, with benefits for strength, flexibility, and balance (Chou, Hwang, & Wu, 2012; Sung, 2009). In addition to providing many physical benefits, physical activity is also associated with an improved sense of well-being, life satisfaction, decreased loneliness (McAuley et al., 2000), and the prevention of cognitive decline (Denkinger, Nikolaus, Denkinger, & Lukas, 2012). These benefits to physical and mental health contribute to maintenance of personal independence (Lexell, Frändin, & Helbostad, 2010) which is particularly relevant for AL tenants. Research also highlights the finding that older adults who engage in more activities stay longer in AL and, therefore, do not transition to more-intensive levels of care, such as nursing homes (Tighe et al., 2008).

Yet despite many known physical, social, and mental benefits of activity participation, older adults in AL may not be as physically active as they should be, regardless of the policies and programs in place. Research has found that AL tenants spend little time in moderate- to vigorous-intensity activity (Resnick, Galik, Gruber-Baldini, & Zimmerman, 2011) despite guidelines for 150 minutes of physical activity each week (Canadian Society for Exercise Physiology, 2011; Physical Activity Guidelines Advisory Committee, 2008), making AL tenants a vulnerable population for mobility disability (Rosenberg, Bombardier, Hoffman, & Belza, 2011) and related detrimental health outcomes.

We used the Social Ecological Model (Stokols, 1996) to assist in conceptualizing factors across multiple levels that contribute to older adults’ abilities to be active in their community, including elements at the individual, community, and societal levels. A key consideration for implementing physical activity strategies in AL is determining the existing capacity and local context of AL sites. Included are factors at the tenant, site, and organizational levels that might influence physical activity programming, which align with the Social Ecological Model and may allow for the identification of multiple points for intervention (Mihalko & Wickley, 2003) to

enhance physical activity opportunities. Program implementation must account for contextual forces, staff skills, and organizational structure that influence the feasibility and uptake of program initiatives; our previous experience with program sustainability identified the importance of understanding this local capacity for health interventions (Hanson & Salmoni, 2011).

With such knowledge, strategies can be identified to enhance existing opportunities as well as to develop and implement strategic social and recreational programming where it is most advantageous for older adults. Therefore, we initiated a three-phase investigation to understand social and recreational opportunities in AL, with particular emphasis on understanding existing and planned opportunities for physical activity in advance of implementing future strategies to increase physical activity among AL tenants. Working with managers and administrators of publicly funded AL sites, we aimed to characterize existing opportunities and gather insights and perceptions on the factors that influence the planning and delivery of activities for AL tenants.

Method

Context

This investigation targeted AL staff and administrators from 51 publicly funded AL sites in two of five local health authorities in British Columbia. Twenty-four sites comprised a mix of publicly funded units and privately paid units in the same facility, while the remaining 27 sites had all publicly funded units. Of the 51 sites, 20 were located in Health Authority 1 (HA1) and were primarily in urban settings; 31 sites

were in Health Authority 2 (HA2), where the catchment area was more suburban in nature and spread across a wider geographic area. The two participating health authorities were those represented on our research team, and thus demonstrated a high degree of engagement and readiness.

Design

This was an explanatory mixed-methods study incorporating three components to understand social and recreational programming in AL. We recognize the importance of including key perspectives; thus, *a priori* we used an integrated knowledge translation (iKT) framework (Gagnon, 2009) to guide this research. The three components were (a) a document review of monthly social and recreational opportunities within AL sites; (b) an electronic survey of AL site managers and recreational coordinators to describe existing program design and delivery; and (c) two interactive, adapted World Café group discussions with AL site staff across two health authorities to gain greater insight into barriers, facilitators, and next steps for health promotion in AL. The components of this multi-stage strategy were selected to provide a system-level overview of the current social and recreational programming in AL to determine *what* was being offered and by *whom*, and to understand *why* and *how* the programming developed. A schematic of the study components is depicted in Figure 1.

Phase 1 – Activity Calendar Document Review

We began our investigation with a document review of monthly social and recreational activity calendars to determine the scope of the existing planned social and

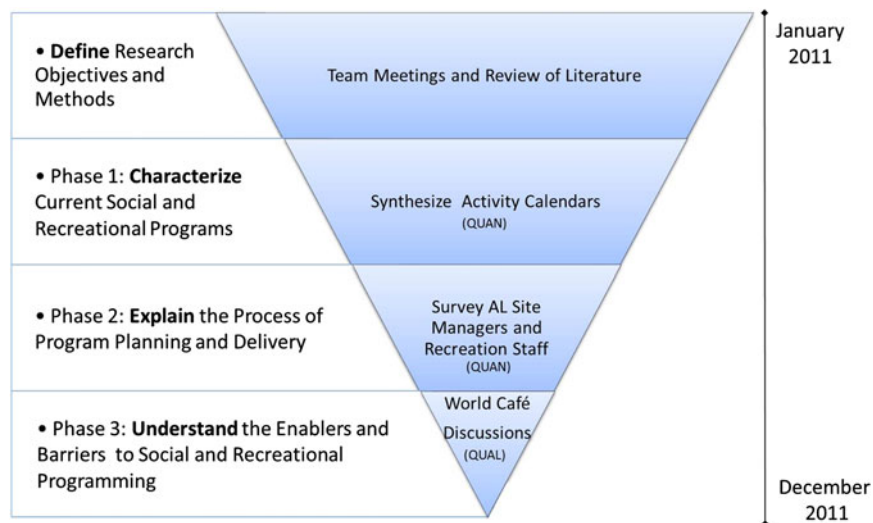


Figure 1: Component methods utilized in the three-phased investigation to understand the factors impacting social and recreational programming in assisted living (AL)

recreational programming opportunities available to AL tenants. This document review was used as a starting point to better understand the organized opportunities for social and recreational activities that were planned by AL staff, and we recognized at the outset that it would not include tenant-initiated activity or spontaneous group activities. We requested activity calendars for the months of June 2010, October 2010, and January 2011 from all sites ($n = 51$); we selected these months to capture potential seasonal differences. We categorized the programming by activity type, with the number of programming opportunities tabulated to determine the total number of offerings per month.

We categorized monthly activities into three activity types: (a) social activities (i.e., opportunities to be socially connected with other people); (b) active recreational opportunities such as physical activity or exercise classes (i.e., bodily movements using large-muscle groups that require energy expenditure); and (c) outings (i.e., off-site activities or trips). We tabulated each category to determine the total number of activities per month.

Phase 2 – Survey of AL Staff on Social and Recreational Opportunities

We invited a representative from each AL site to participate in a web-based survey focused on the physical activity and exercise opportunities offered to tenants; our goal was to specifically survey the staff involved in planning and/or delivering social and recreational programming at each site. Survey questions addressed site and respondent characteristics, the development and evaluation of activities, characteristics of exercise classes offered, and the barriers and facilitators to social and recreational programming. In advance, we pilot tested the survey through two iterative rounds with members of the project team and made changes to improve clarity. Following this, we invited a representative from each of the 51 AL sites to complete the electronic survey through an email invitation and letter of information. Participation was anonymous but as a gesture of thanks for sharing their time, respondents could opt to enter their name into a drawing for a gift certificate to a craft store to enhance a current or upcoming recreational activity. Participant names were not linked to survey responses.

Phase 3 – World Café Discussions

In the final phase, we sought feedback on the factors that enhance and limit social and recreational programming through an interactive discussion format. We held two half-day events to bring together individuals involved in the planning and/or delivery of recreational programming to discuss the factors that enhance

and limit social and recreational programming. The events used an adapted World Café format (Brown & Isaacs, 2005), a process to engage participants in small group discussions through evolving rounds of questions on a topic area. This strategy allowed participants to contribute their own responses to the dialogue as well as build upon the comments of others. The process has been utilized effectively across multiple health research contexts (Burke & Sheldon, 2010; Emlet & Mocerri, 2012; McAndrew, Warne, Fallon, & Moran, 2012). The goal of our small group discussion was to explore the factors that affect the planning, delivery, and uptake of social and recreational programming in AL.

During each of the two sessions, attendees circulated around the room, sharing experiences and perceptions on topics relevant to planning and delivering recreational programming to older adult tenants. The topics were developed in collaboration by the authors (M.C.A., H.M.H., A.D.W.) based on questions that were raised during Phases 1 and 2 and the desire to determine future interest in collaborative efforts, keeping with our iKT approach to this work. The topics included (a) facilitators and barriers to recreational programming, (b) program planning and delivery, (c) perspectives on active living, and (d) partnerships for moving forward. Each table had a discussion moderator who remained at the table during all discussion rounds and a table scribe who rotated through the room with attendees. Data that were collected included the point-form notation of key discussion topics, discussion notes taken by table scribes, and theme summaries generated by the table moderators and event facilitator. Verbatim recordings were not collected; however, key phrases or attendee quotes were written verbatim and identified by scribes and table discussion moderators with quotation marks.

Analysis

Each phase of this investigation was reviewed by the study team during team meetings. In addition to offering direction on the overall design and methods of the subsequent phases, this review aided in sharing preliminary discoveries with our knowledge partners. Quantitative data from Phases 1 and 2 were analyzed for descriptive summary statistics (mean; standard deviation). Quantitative analyses were conducted using a statistical data analysis package (IBM SPSS software version 19.0). Phase 2 open-ended questions were grouped by theme, with minor editing to collapse duplicate responses and preserve respondent anonymity. In Phase 3, one author (H.M.H.) analyzed the data for emerging themes using an iterative process and following a contemporary content analysis approach (Schwandt, 2007). The interpretation and thematic

categories were then confirmed with the table moderators and event facilitators to ensure accurate and complete representation of the data. At the completion of the project, the findings from Phases 1, 2, and 3 were synthesized to identify and understand the key themes that emerged across the study components. The synthesis was initiated by one author (H.M.H.) with successive iterations informed by consultation with, and reflections of, the research team. All work was approved by the local hospital, health authority, and university research ethics boards, and participants provided informed consent.

Results

Phase 1

Eligible activity calendars were submitted by 40 AL sites. Thirty-six sites were able to supply the June 2010 calendar, 38 supplied the October 2010 calendar, and 39 supplied the January 2011 calendar, with 34 sites providing all three of the requested months. Sites did not appear to fluctuate in the number of activities across seasons, as the maximum difference was ± 4 opportunities per category per month. Averaged across the three months, the number of planned recreational opportunities ranged from 16 to 194 opportunities per month ($M = 104.2$, $SD = 41.8$). Approximately 72 per cent of the opportunities available were determined to be social activities, 24 per cent were physical activity or exercise classes, and 4 per cent were outings.

We observed consistency across sites and health authorities. Cards and games (bingo) were frequently offered social opportunities, as were movie showings, and coffee/tea times. Common physical activity and exercise options included walking programs, tai chi, and group physical activities such as shuffleboard and bocce ball. Off-site activities, while less frequent across sites in general, also had some common types of opportunities, including trips to shopping centres and visits to other communities for lunches.

Phase 2

A total of 38 AL staff members completed the electronic survey to provide information on the social and recreational programming offered at the site with which they were affiliated. We received equal participation from the two health authorities. Respondents were affiliated with a minimum of 27 different AL sites (in an effort to afford respondents anonymity, respondents could, but were not required to, disclose the site from which they were responding).

Respondents were quite varied in the amount of their full-time equivalent that was dedicated to the planning and/or delivery of social and recreational programming,

but in general had more time dedicated to the delivery than to the planning of activities and programming. In contrast, respondents were less varied in their perceptions of support. Specific to offering physical activity programming at their site, almost three-fourths of respondents reported the support received from other site staff was either good or excellent. Similar perceptions were held for support received from administration, with just over 75 per cent of respondents rating administrative support for physical activity programming to be good to excellent. The importance of encouraging physical activity among tenants was high, with approximately 90 per cent of respondents from both health authorities identifying the conviction that encouraging tenants to be physically active was very important (Table 1).

Respondents provided detailed information on the exercise classes run at their sites, defined as those classes that specifically aimed to increase the heart rate/breathing of those attending in order to capture target activities that meet or exceed a moderate intensity level (Canadian Society for Exercise Physiology, 2011).

Details were provided for a total of 115 exercise classes (see Table 2). The majority of classes (73.9%) lasted between 30–59 minutes in duration and were run in a group format ranging from 5 to 14 tenants (73.0%). Only 29.5 per cent of classes were offered at a frequency of three or more times per week. Less than one third of the classes were delivered by an instructor who held a certification for exercise leaders or was a physical/occupational therapist/kinesiologist. Twenty-nine per cent of classes targeted muscular strength as the main focus, with slightly fewer classes focusing on flexibility or balance (25.0% each) and cardiovascular endurance (21.0%). Half of all exercise classes were conducted with tenants remaining in the seated position (50.7%). Tenants spent equal time sitting and standing in 31.9 per cent of exercise classes, and only 17.4 per cent of classes were reported to spend the majority of the session in the standing position. For exercise progression, 58 per cent of reported classes included progression of exercises.

Phase 3

Sixty attendees, including AL administrators and staff, practitioners, and researchers, participated in the interactive symposia events. Attendees represented 32 AL sites, both health authorities, and two large universities. A number of themes emerged from the small group discussions, both within and across table topics, crossing the four broad categories of (a) physical activity, (b) social activity and active living, (c) social and mental well-being, and (d) challenges

Table 1: Frequency and percentages of responses for the Phase 2 Survey of Assisted Living Staff ($n = 38$) on social and recreational opportunities at their sites

	Frequency of Responses	Percentage of Responses
Approximately what percentage of your Full-Time Equivalent (FTE) is dedicated to the planning of recreational programming? ($n = 35$)		
0–24 per cent of respondent FTE	13	37.1
25–49 per cent of respondent FTE	14	40.0
50–74 per cent of respondent FTE	5	14.3
75–100 per cent of respondent FTE	3	8.6
Approximately what percentage of your FTE staff is dedicated to the delivery of recreational programming? ($n = 35$)		
0–24 per cent of respondent FTE	7	20.0
25–49 per cent of respondent FTE	9	25.7
50–74 per cent of respondent FTE	7	20.0
75–100 per cent of respondent FTE	12	34.3
What is your formal education/training/background? ($n = 37$)		
Diploma/Certificate in recreation	18	48.6
Health care worker/Health care professional	6	16.2
All other education/training/backgrounds	13	35.1
Who develops new programming options for your AL site? (frequency responding “Yes”) ($n = 74$ observations from 38 respondents)*		
Site manager	9	23.7
Recreation staff	36	94.7
Other care staff	1	2.6
Tenants	19	50.0
Family or loved ones of tenants	6	15.8
Other	3	7.9
How do you promote your recreational programming to tenants? (frequency responding “Yes”) ($n = 208$ observations from 38 respondents)^a		
Newsletters	20	52.6
Tenant word-of-mouth	32	84.2
Staff word-of-mouth	28	73.7
Tenant Council	29	76.3
Activity Board	34	89.5
Activity calendar distributed to each tenant	38	100.0
Staff/Volunteer escorting tenants to events	19	50.0
Other	8	21.1
Approximately what percentage of your tenants regularly participates in recreational programming offered outside your site? (e.g., at a local community centre) ($n = 35$)		
None–20 per cent of tenants	24	68.6
21–40 per cent of tenants	6	17.1
41–60 per cent of tenants	2	5.7
61–80 per cent of tenants	3	8.6
81–100 per cent of tenants	0	0.0
How important do you feel it is to encourage physical activity among your tenants? ($n = 38$)		
Not at all important	0	0.0
Somewhat important	4	10.5
Very important	34	89.5
How would you rate the support you receive from administration for offering physical activity programming at your site? ($n = 36$)		
Below average	2	5.6
Average	7	19.4
Good	16	44.4
Excellent	11	30.6

^a Respondents could respond to more than one item

Table 2: Frequency and percentages of responses for the Phase 2 Survey of Assisted Living Staff (n = 38) reporting on 115 exercise classes conducted at their sites (respondents could report on more than one class, as long as it met the inclusion criteria)

	Frequency	Percentage
Who leads the session? (n = 114 classes)		
Respondent	55	48.2
In-house staff	31	27.2
External/Contracted individual	22	19.3
Volunteer	6	5.3
Background/training of session instructor (n = 115 classes)		
Recreation and leisure	46	40.0
Kinesiology	3	2.6
Physiotherapy/Occupational therapy	7	6.1
Nursing	1	0.9
Certification for exercise leaders	25	21.7
Other related background/training	21	18.3
No related background/training	8	7.0
Unsure/Don't know	4	3.5
Duration of each session (n = 115 classes)		
Less than 30 minutes	21	18.3
30–59 minutes	85	73.9
60 minutes or longer	9	7.8
Frequency of sessions (n = 112 classes)		
1 session per week	53	47.3
2 sessions per week	26	23.2
3 sessions per week	19	17.0
4–7 sessions per week	14	12.5
Typical number of attendees (n = 63 classes)		
1–4 tenants	7	11.1
5–8 tenants	24	38.1
9–14 tenants	22	34.9
15 tenants or more	10	15.9
Main area of focus in the session (n = 100 classes)		
Muscular strength	29	29
Cardiovascular endurance	21	21
Flexibility	25	25
Balance	25	25
Equipment used (n = 95 classes)		
Hand-held/Strap weights	7	7.4
Resistance bands/Elastic tubing	11	11.6
Stationary equipment	4	4.2
More than one piece of equipment	26	27.4
No pieces of equipment	33	34.7
Other pieces of equipment	14	14.7
What position are tenants in for the majority of the session? (n = 69 classes)		
Seated	35	50.7
Standing	12	17.4
Equal time seated and standing	22	31.9
Do the movements/exercises get harder as the class progresses? (n = 60 classes)		
Yes	35	58.3
No	25	41.7

for program delivery and tenant engagement. The key findings, discussed below, reflect enabling and restricting factors at the individual, site, and organizational levels (see Figure 2).

Physical Activity. Attendees identified physical activity as a key area for maintaining and improving the health of the tenants. However, this was countered by some of the assumptions held about the aging process and the role of AL. Attendees perceived that many tenants were not very active; some tenants were content “just to sit”, as AL does a very effective job of taking care of the majority of their day-to-day needs. Education and awareness of an active lifestyle and clarification of the role of service provision were potential strategies for addressing these tenant assumptions.

Social Activity and Active Living. It was emphasized that social activities were typically well attended by a diverse representation of tenants, but fewer tenants elected to take part in physical activities, such as formal exercise programming. This opened the discussion around incorporating a physical activity, or active living, component into other dimensions of the social and recreational programming options. Purposeful activities, such as gardening, group walking programs, and off-site outings were cited as examples of where an active living component was built into the social activity, thereby providing physical activity. A general view of attendees was that any programming that gets tenants out of their suite is beneficial, whether it be to take part in a social tea or birthday celebration, group outing, or exercise class. Enjoyment within programming was a recurring topic in these discussions.

Social and Mental Well-being. A prominent theme was the role that recreational programming plays in the social and mental well-being of tenants. Many attendees believed that recreational opportunities served an important role for tenants' social contact. However, attendees consistently commented on the need to

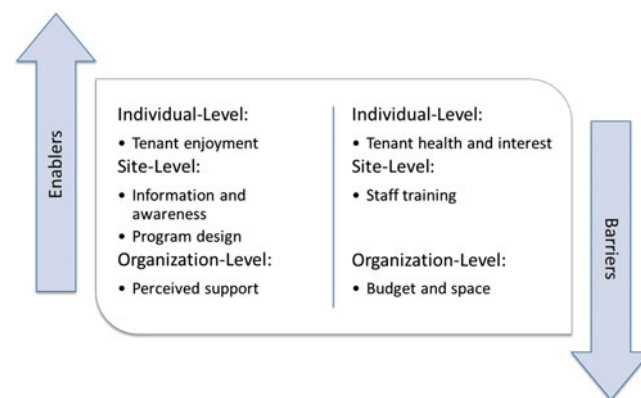


Figure 2: Key factors found to impact the planning and delivery of social and recreational programming in assisted living (AL)

further address tenant social isolation and mental health. Meeting tenants' emotional needs, including creating personal connections and caring relationships, and addressing isolation, were areas expressed by attendees as having priority for the tenants' overall well-being. The value of recreational programming was routinely underscored; attendees stated that social and recreational opportunities provided meaningful activities for tenants with holistic health benefits while contributing to the social environment and sense of community at each site. Many believed that the social and recreational program at their site was the ideal vehicle for fostering a sense of community, both within the AL site and in connection to the broader community.

Challenges for Program Delivery and Tenant Engagement. Encouraging participation in programming opportunities presented challenges; attendees stated that they believed they were often walking a fine line between reminding people of events and nagging them. This balance between promoting activities, and respecting individual autonomy and the choice-based philosophies central to AL, was an important distinction. Some attendees reported success in emphasizing tenant-led initiatives and offered tenants avenues in which to express their needs and ideas. Finding individual motivations was often helpful in increasing engagement, and linked opportunities to personal history or previous hobbies. Yet attendees expressed the view that time constraints limited the ability to meet individually with tenants to determine motivating factors even though social and recreational programming was perceived as having high importance and administrative support.

Table topic discussions emphasized that AL staff have a high level of dedication for planning and delivering quality programming, yet barriers exist. For example, financial resources available for delivering social and recreational programs were often a challenge. The funding structure for recreational programming differed slightly in the two health authorities, yet attendees from both sites reported that a lack of financial resources limited the scope of their overall programming. Staffing issues were also a commonly cited obstacle. Some sites that relied heavily on volunteers were concerned about burnout, while other sites noted challenges in recruiting volunteers. Furthermore, physical space constraints presented barriers as not all sites had permanent space in their facility for recreational activities, which meant that they had to deliver activities in common areas such as sitting areas and dining rooms. This was especially challenging when using the site's dining space for classes, as the time between the clearing of one meal and set-up for the next offered a very short window of availability with resultant scheduling conflicts.

Finally, a frequently cited barrier to programming was factors related to tenants. Limited mobility and forgetfulness were commonly viewed as restricting factors in getting tenants to take part in the programs offered. The personal interests of tenants were also cited, as many sites were challenged to find activities that interested the majority of tenants. And the overall physical health of tenants was cited as a limitation, particularly when more one-on-one assistance was needed or the staff believed that they were not equipped to address the complex health status of some tenants.

Discussion

In this three-phased investigation, we gained insight into factors that influence planned social and recreational programming in AL. Sites reported that social opportunities were better attended than exercise classes, and believed that such activities met the holistic health needs of tenants by fostering a sense of community and providing a mechanism for socialization, both of which were felt to meet the emotional needs of tenants and maintain mental well-being.

The importance of physical activity was a recurring discussion point. Staff commented on the low levels of physical activity among some tenants, reinforcing previous research findings on high amounts of sedentary time and low moderate- to vigorous-physical activity (Resnick et al., 2011) among AL tenants, making them a vulnerable population for mobility disability (Rosenberg et al., 2011) and related detrimental health outcomes. However, low levels of physical activity are also observed in the community-dwelling older adult population. For example, using the Canadian Community Health Survey, researchers noted that only 23 per cent of older adults with chronic conditions engaged in sufficient weekly physical activity (Ashe, Miller, Eng, Noreau, and Physical Activity & Chronic Conditions Research Team, 2009). One group at greatest risk of inactivity was women aged 80 and older where only 7.4 per cent met recommended guidelines for physical activity (Ashe et al., 2009). However, this relationship is complex, as some literature has found that increasing severity of co-morbid conditions can cause older adults to replace physical activity with less socially or physically active pursuits (Zimmer, Hickey, & Searle, 1995). Therefore, a comprehensive and multidimensional perspective is needed to accurately capture a more complete picture of social and recreational opportunities in AL.

Our findings from Phase 2 asked about exercise opportunities. Many of the activities offered specifically as exercise classes were delivered with participants remaining in a seated position for the majority of the class duration. Such classes may not be taking advantage

of the potential to challenge the balance of those participating, or to offer similar benefits that would be afforded by maintaining an upright position such as preserving or improving lower body strength. Accordingly, there is a potential loss of related health benefits, such as falls prevention and maintenance of mobility.

The interplay between older adults' health and interest has been noted in previous literature. For example, older adults, particularly those with existing health issues or concerns, can be hesitant to engage in physical activity, citing misconceptions, warnings, or advice against physical activity (Hirvensalo, Heikkinen, Lintunen, & Rantanen, 2005; King, 2001) or fears of injury and falls (Murphy, Williams, & Gill, 2002; Yardley, Donovan-Hall, Francis, & Todd, 2006). A recent systematic review investigating motivators and barriers to physical activity in the oldest old reported limited evidence for adults aged 80 and older (Baert, Gorus, Mets, Geerts, & Bautmans, 2011). Baert et al. noted that personal barriers included health and fear of falling, as well as weather, environmental issues, and lack of social support. However, the benefits of physical activity have been found to include reduced falls risk (Gardner, Robertson, & Campbell, 2000) with walking presenting one low-risk, safe physical activity option for older adults (Ory et al., 2005). On the basis of their systematic review, Baert et al. (2011) suggested that health care workers could be involved in encouraging more physical activity within the nursing home setting. Resnick et al. (2011) tested this model by engaging AL care workers in encouraging more physical activity with tenants with their everyday activities of daily living. As a result, at 12 months, AL tenants receiving the intervention engaged in more activity (as measured by accelerometry) (Resnick et al., 2011).

Important considerations related to increasing the exercise class options included tenant health and perceptions of preparedness. Our findings shed light on the perceived self-efficacy of staff in delivering exercise classes, with staff reporting a lack of expertise in both addressing tenants' complex health needs and in delivering a safe, yet challenging, class. Although greater numbers of formal exercise classes with adequate staff support might seem the most obvious solution to increasing tenants' physical activity, we do not know the ideal mix of programming that is most resource effective while simultaneously offering tenants a variety of options and enjoyment. While tailoring activities to personal preferences may increase adherence (Dattilo, Martire, & Proctor, 2012), AL staff reported time constraints. One opportunity to consider is using social activities to increase physical activity. In addition to providing benefits in its own right, participation in social programming can also result in the positive by-product of increased light- to moderate-intensity physical activity. Potential avenues for future

investigation could be to capitalize on the high engagement rates of social activities and build elements into the programming that are designed to increase physical activity or offer meaningful physically active recreation opportunities (Porter, Shank, & Iwasaki, 2012) such as gardening. In addition, the utilitarian or instrumental walking (Gauvin et al., 2008; Joseph & Zimring, 2007) that is required to get to and from activities may also be an important source of physical activity generated by social and recreational programming. For example, tenants typically have to leave their suites and walk to the social programming, which itself provides a source of physical activity.

Although challenges exist, AL staff maintained that physical activity was of high importance. In a continuing care context, Harris-Kojetin, Kiefer, Joseph, and Zimring (2005) used management perceptions as a proxy for the level of commitment to encouraging physical activity. They also found that levels of support for, and importance placed on, physical activity translated into higher physical activity levels among retirement community residents. In the present study on AL, the parallel would be promising as it would extrapolate to a high level of commitment for furthering physical activity efforts and the potential for collaborations regarding future interventions.

The findings support our original application of the Social Ecological Model as appropriate for guiding our understanding of the factors that can contribute to older adults' activity patterns. As diagrammed in Figure 2, barriers and enablers to the planning and delivery of social and recreational opportunities exist at the individual, site, and organizational levels. By recognizing and understanding the multiple levels of influence, effective strategies can be developed and implemented to positively influence the type and quality of programming offered to AL tenants.

An unexpected finding of this investigative work was the challenge staff expressed when trying to find a balance between their efforts to engage tenants and being perceived as pressuring or strong-arming tenants to participate. The choice-based philosophy central to AL allows tenants their rightful free will, with the personal autonomy to choose, or not, to participate in services or events offered at their site. Staff reported that they typically felt like they were "walking a fine line" between reminding tenants of the opportunities available and nagging them to take part.

We recognize some limitations to this work. First, we used self-reports to obtain details on the exercise classes. While other methods, such as direct observation, would have provided the ability to objectively measure the specific characteristics of programming (such as the intensity and duration of exercise classes

or attendance rates, across multiple sites and varied class schedules), this was not a feasible data collection option. Second, although we were able to collect some details on the characteristics of the exercise classes, we cannot speak to the quality of delivery, which might influence tenants' perceptions of benefit and enjoyment, factors that should be considered when developing future programming options. It is also likely that the participating AL staff reflected the perspectives of individuals who were particularly motivated to offer high-quality programming. Further, by reviewing prepared activity calendars, we captured only organized social and recreational opportunities within our document review and not the physical activity tenants engage in outside the activity calendar's organized opportunities. Our results may therefore underestimate the total physical activity levels of tenants and the challenges associated with program delivery in AL. However, the comprehensiveness of this work offsets these limitations and provides detailed information on the planning and delivery of recreation in AL.

Conclusion

Our study characterized key factors associated with the planning and delivery of social and recreational opportunities offered by publicly funded AL sites in British Columbia. Although barriers certainly exist, AL care providers are doing what they can within the restrictions they experience to deliver enjoyable and effective programming for their tenants. Thus, this work provided an understanding of the enabling and limiting factors for social and recreational programming. In line with the Social Ecological Model, avenues to address the barriers to social and recreational programming could include interventions targeted at the individual, site, or organizational levels. Interventions of this type would go part of the way in meeting Mihalko and Wickley's (2003) call for multiple points of intervention within the AL setting. By increasing physical activity levels, we would be taking a literal and metaphorical step towards the overall goal of improving the health and quality of life of AL tenants.

References

- Ashe, M. C., Miller, W. C., Eng, J. J., Noreau, L., & Physical Activity & Chronic Conditions Research Team. (2009). Older adults, chronic disease and leisure-time physical activity. *Gerontology, 55*(1), 64–72. doi:10.1159/000141518.
- Baert, V., Gorus, E., Mets, T., Geerts, C., & Bautmans, I. (2011). Motivators and barriers for physical activity in the oldest old: A systematic review. *Ageing Research Reviews, 10*(4), 464–474. doi:10.1016/j.arr.2011.04.001.
- British Columbia Ombudsperson. (2012). *The best of care: Getting it right for seniors in British Columbia (Part 2)* (Public Report No. 47 to the Legislative Assembly of British Columbia). Retrieved 25 April 2013 from http://www.bcombudsperson.ca/images/pdf/seniors/Seniors_Report_Overview.pdf.
- Brown, J., & Isaacs, D. (2005). *The World Café: Shaping our futures through conversations that matter*. San Francisco, CA: Barrett-Koehler.
- Burke, C., & Sheldon, K. (2010). Encouraging workplace innovation using the 'world cafe' model. *Nursing Management, 17*(7), 14–19.
- Canadian Society for Exercise Physiology. (2011). Canadian physical activity guidelines for older adults – 65 years and older: 2011 scientific statements. Retrieved 25 April 2013 from www.csep.ca/guidelines.
- Chou, C. H., Hwang, C. L., & Wu, Y. T. (2012). Effect of exercise on physical function, daily living activities, and quality of life in the frail older adults: a meta-analysis. *Archives of Physical Medicine and Rehabilitation, 93*(2), 237–244. doi:10.1016/j.apmr.2011.08.042.
- Darton, R., Baumker, T., Callaghan, L., Holder, J., Netten, A., & Towers, A. M. (2012). The characteristics of residents in extra care housing and care homes in England. *Health & Social Care in the Community, 20*(1), 87–96. doi:10.1111/j.1365-2524.2011.01022.x.
- Dattilo, J., Martire, L., & Proctor, D. (2012). B-Active: An interdisciplinary approach to healthy aging. *Therapeutic Recreation Journal, 46*(3), 191–201.
- Denkinger, M. D., Nikolaus, T., Denkinger, C., & Lukas, A. (2012). Physical activity for the prevention of cognitive decline: Current evidence from observational and controlled studies. *Zeitschrift für Gerontologie und Geriatrie, 45*(1), 11–16. doi:10.1007/s00391-011-0262-6.
- Emler, C. A., & Mocerri, J. T. (2012). The importance of social connectedness in building age-friendly communities. *Journal of Aging Research, 2012*, 1–9. doi:10.1155/2012/173247.
- Gagnon, M. (2009). Knowledge dissemination and exchange of knowledge. In S. Strauss, J. Tetroe, & I. D. Graham (Eds.), *Knowledge translation in health care: Moving from evidence to practice* (pp. 235–245). Hoboken, NJ: Blackwell.
- Gardner, M. M., Robertson, M. C., & Campbell, A. J. (2000). Exercise in preventing falls and fall related injuries in older people: a review of randomised controlled trials. *British Journal of Sports Medicine, 34*(1), 7–17.
- Gauvin, L., Riva, M., Barnett, T., Richard, L., Craig, C. L., Spivock, M. L., et al. (2008). Association between neighborhood active living potential and walking. *American Journal of Epidemiology, 167*(8), 944–953. doi:10.1093/Aje/Kwm391.
- Hanson, H. M., & Salmoni, A. W. (2011). Stakeholders' perceptions of programme sustainability: Findings from a community-based fall prevention programme. *Public Health, 125*(8), 525–532. doi:10.1016/j.puhe.2011.03.003.

- Harris-Kojetin, L., Kiefer, K., Joseph, A., & Zimring, C. (2005). Encouraging physical activity among retirement community residents: the role of campus commitment, programming, staffing, promotion, financing, and accreditation. *Seniors Housing & Care Journal*, 13(1), 3–20.
- Hatch, J., & Lusardi, M. M. (2010). Impact of participation in a wellness program on functional status and falls among aging adults in an assisted living setting. *Journal of Geriatric Physical Therapy*, 33(2), 71–77.
- Hirvensalo, M., Heikkinen, E., Lintunen, T., & Rantanen, T. (2005). Recommendations for and warnings against physical activity given to older people by health care professionals. *Preventative Medicine*, 41(1), 342–347. doi:10.1016/j.jpmed.2004.11.020.
- Joseph, A., & Zimring, C. (2007). Where active older adults walk – Understanding the factors related to path choice for walking among active retirement community residents. *Environment and Behavior*, 39(1), 75–105. doi:10.1177/0013916506295572.
- King, A. C. (2001). Interventions to promote physical activity by older adults. *Journals of Gerontology: Series A Biological Sciences & Medical Sciences*, 56(Spec No 2), 36–46.
- Lexell, J., Frändin, K., & Helbostad, J. L. (2010). Chapter 14: Elderly. In Swedish National Institute of Public Health (Ed.), *Physical activity in the prevention and treatment of disease* (pp. 200–208). Retrieved 25 April 2013 from <http://www.fhi.se/PageFiles/10682/Physical-Activity-Prevention-Treatment-Disease-webb.pdf>.
- Lieto, J. M., & Schmidt, K. S. (2005). Reduced ability to self-administer medication is associated with assisted living placement in a continuing care retirement community. *Journal of the American Medical Directors Association*, 6, 246–249.
- McAndrew, S., Warne, T., Fallon, D., & Moran, P. (2012). Young, gifted, and caring: A project narrative of young carers, their mental health, and getting them involved in education, research and practice. *International Journal of Mental Health Nursing*, 21(1), 12–19. doi:10.1111/j.1447-0349.2011.00762.x.
- McAuley, E., Blissmer, B., Marquez, D. X., Jerome, G. J., Kramer, A. F., & Katula, J. (2000). Social relations, physical activity, and well-being in older adults. *Preventive Medicine*, 31(5), 608–617. doi:10.1006/pmed.2000.0740.
- Mihalko, S. L., & Wickley, K. L. (2003). Active living for assisted living – Promoting partnerships within a systems framework. *American Journal of Preventive Medicine*, 25(3), 193–203. doi:10.1016/S0749-3797(03)00184-3.
- Mitchell, J. M., & Kemp, B. J. (2000). Quality of life in assisted living homes: a multidimensional analysis. *Journals of Gerontology: Series B, Psychological Sciences & Social Sciences*, 55(2), P117–P127.
- Murphy, S. L., Williams, C. S., & Gill, T. M. (2002). Characteristics associated with fear of falling and activity restriction in community-living older persons. *Journal of the American Geriatric Society*, 50(3), 516–520. doi: 50119 [pii].
- Ory, M., Resnick, B., Jordan, P. J., Coday, M., Riebe, D., Ewing, G. C., et al. (2005). Screening, safety, and adverse events in physical activity interventions: collaborative experiences from the behavior change consortium. *Annals of Behavioral Medicine*, 29(Suppl), 20–28. doi:10.1207/s15324796abm2902s_5.
- Physical Activity Guidelines Advisory Committee. (2008). *Physical Activity Guidelines Advisory Committee Report, 2008*. Washington, DC: U.S. Department of Health and Human Services.
- Porter, H. R., Shank, J., & Iwasaki, Y. (2012). Promoting a collaborative approach with recreational therapy to improve physical activity in type 2 diabetes. *Therapeutic Recreation Journal*, 46(3), 202–217.
- Province of British Columbia Ministry of Attorney General. (2002). *Community Care and Assisted Living Act* (SBC 2002, Chapter 75). Retrieved 25 April 2013 from http://www.bclaws.ca/EPLibraries/bclaws_new/document/ID/freeside/00_02075_01.
- Resnick, B., Galik, E., Gruber-Baldini, A., & Zimmerman, S. (2011). Testing the effect of function-focused care in assisted living. *Journal of the American Geriatrics Society*, 59(12), 2233–2240. doi:10.1111/j.1532-5415.2011.03699.x.
- Rosenberg, D. E., Bombardier, C. H., Hoffman, J. M., & Belza, B. (2011). Physical activity among persons aging with mobility disabilities: Shaping a research agenda. *Journal of Aging Research*, 2011, 1–16.
- Schwandt, T. A. (2007). *The Sage dictionary of qualitative inquiry*. Sage: Thousand Oaks, CA.
- Stokols, D. (1996). Translating social ecological theory into guidelines for community health promotion. *American Journal of Health Promotion*, 10(4), 282–298.
- Sung, K. (2009). The effects of 16-week group exercise program on physical function and mental health of elderly Korean women in long-term assisted living facility. *Journal of Cardiovascular Nursing*, 24(5), 344–351. doi:10.1097/JCN.0b013e3181a80faf.
- Tighe, S. K., Leoutsakos, J.-M. S., Carlson, M., Onyike, C. U., Samus, Q., Baker, A., et al. (2008). The association between activity participation and time to discharge in the assisted living setting. *International Journal of Geriatric Psychiatry*, 23, 586–591.
- Yardley, L., Donovan-Hall, M., Francis, K., & Todd, C. (2006). Older people's views of advice about falls prevention: a qualitative study. *Health Education Research*, 21(4), 508–517. doi:10.1093/her/cyh077.
- Zimmer, Z., Hickey, T., & Searle, M. S. (1995). Activity participation and well-being among older people with arthritis. *The Gerontologist*, 35(4), 463–471.