

Patterns of shelter use amongst men new to homelessness in later life: Duration of stay
and psychosocial factors related to departure

David W. Rothwell

Tamara Sussman

Amanda Grenier

Sebastian Mott

Valerie Bourgeois-Guerin

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Abstract

People who become homeless for the first time in late life are a growing but understudied population. This study draws on administrative data from one shelter (N = 1,214 first time homeless) to assess the extent to which age is related to shelter stay and, to examine psychosocial factors that may be associated with shelter departure. Our bivariate and survival analysis results suggest that older homeless men stay in the shelter two weeks longer than younger clients. Older men with pending legal issues and mobility concerns were more likely to leave the shelter than those without such concerns. Findings highlight the impact of age and other psychosocial variables on shelter stay, and provide direction from which to address homelessness amongst men who are new to homelessness in later life.

Key words: homeless, men, social services

Despite the anticipated growth of homelessness in late life, especially for men in OECD countries (Crane et al., 2005), limited research exists. Within this small body of emerging literature (Grenier, Barken, Sussman, Rothwell & Lavoie, in press) only a handful of researchers have focused on the trends and typologies of older people who find themselves homeless for the first time in late life (Petersen & Parsell, 2014). Yet, adults facing homelessness for a first time in older age are reported to have different experiences and service needs than those who are aging in situations of chronic homelessness (Aubry, Farrell, Hwang, & Calhoun, 2013), and such differences can be important where policy and community-based planning are concerned. This paper analyzes how age and psychosocial vulnerability work together to impact patterns of shelter use amongst men who use the shelter system for the first time (i.e., first time homelessness) in order to inform policies and practices for older people who are homeless.

Prevalence and vulnerabilities experienced by older homeless adults

Homeless adults are typically considered 'older' in their early to mid-fifties as they tend to show physical and cognitive signs of aging approximately ten years earlier than non-homeless adults (Gonyea, Mills-Dick, & Bachman, 2010; Ploeg, Hayward, Woodward, & Johnston, 2008). Recent estimates suggest that older homeless adults represent between 10% to 15% of the total homeless population in the United States (Gonyea et al., 2010) and that 10% of shelter users in Canada are older homeless adults (McDonald, Dergal & Cleghorn, 2004).

Individual vulnerabilities associated with either becoming or remaining homeless in later life (age 50 and over) include substance abuse, mental health issues legal

problems and life events such as widowhood, marital breakdown, eviction, and physical health problems (Garibaldi, Conde-Martel, & O'Toole, 2005). It is noteworthy that two of the life events identified as triggering homelessness - health problems and widowhood - increase in prevalence in advanced age (National Institute on Aging, 2011). It is also noteworthy that individual risk factors that are associated with becoming or remaining homeless in old age can be exacerbated by structural forces such as shortages of available low-income housing for older adults with health needs, substance abuse programs that target younger cohorts, and ageism (Watson, George, & Walker, 2008).

Prevalence and vulnerabilities of older homeless men

The majority of older homeless adults are reported to be men. Estimates from England, the United States and Australia, suggest the proportion of total homeless who are male ranges between 63 and 92% (Crane et al., 2005; Crane & Warnes, 2010). What is problematic from a service perspective is that the average duration of homelessness appears to be higher among older homeless men than homeless adults in general, and older homeless women in particular (Hecht & Coyle, 2001; North & Smith, 1993).

While many of the individual vulnerabilities associated with entering or remaining homeless appear similar for men and women (McDonald et al., 2007; Rich & Clark, 2005), there are some important gender differences. Older men's homelessness is most often attributed to loss of employment, severity of mental illness, substance abuse, and criminality or legal problems (Kim et al., 2010; Peressini, 2007). Further, men (and especially those new to homelessness in later life) appear to be particularly impacted by a rapidly changing and globalized economy. For example, labour market changes in the steel, automobile production, and pulp and paper industries have resulted in a substantial

decline in weekly earnings over the past half century and/or permanent job loss (Fortin, Green, Lemieux, Milligan, & Riddell, 2012). Within this structural context of growing economic precarity, a rise in men who are new to homelessness in later life is expected (Crane & Warnes, 2010).

Newly homeless older adults

Only a handful of researchers have examined the needs and experiences of older people who are newly homeless. Yet, all of these point to the significance of age and the complexity of homelessness in later life. Findings based in the U.S., Canada, the U.K. and Australia flag a number of possible issues. Caton and colleagues (2005) conducted a longitudinal study with 377 men and women new to the shelter system in New York City. Their findings revealed that the median number of days in homelessness was greatest amongst the 'older' group (age 44+) suggesting they were at heightened risk for becoming chronically homeless. In Toronto, Canada, McDonald and colleagues (2007) conducted structured interviews with 68 older homeless persons to compare differences in profiles and service utilization of those who became homeless prior to and after age fifty. Their findings suggested that older adults new to homelessness feel less safe in shelters, less informed about available services, and prefer informal assistance to formal assistance than adults who have grown old homeless. In the U.K. and Australia, Crane et al. (2005) and Petersen and Parsell (2014) conducted studies on pathways into first time homelessness in later life, with samples of 377 and 561 respectively. They found that eviction, relational breakdown, monetary challenges with rent, inability to continue living with family and inaccessible rental housing could lead to late-life homelessness.

The combined findings suggest that persons who became homeless for the first time in later life (generally 50+, although some studies have used other thresholds) have different pathways into homelessness, barriers to exiting homelessness, and service needs than both newly homeless adults whom are younger, and older homeless adults with experiences of homelessness across the life course. In addition to age, psychosocial complexity among older adults who are homeless seems to emerge as a key consideration for policy and planning. While these studies make important and significant contributions to understandings of homelessness, they are based on relatively small sample sizes (McDonald et al., 2007), self –selected participants (Crane et al., 2005; McDonald et al., 2007), non-standardized measures (Crane et al., 2005), inconsistent operationalization of ‘older’ homelessness (e.g., Caton et al., 2005 used 44+, others used 50+ Gonyea et al., 2010; Grenier et al., in press), and for the most part are descriptive rather than explanatory (Crane et al., 2005; McDonald et al., 2007).

Our study aims to advance knowledge in four ways. First, our longitudinal sample is considerably larger than previous work on first-time homelessness in later life. Our sample includes 1,214 homeless men who were followed through the shelter system for six months. Second, our study includes all male clients served by the agency, not only those who self-selected to participate in the study, which would suggest greater generalizability of results. Third, we use a standardized and validated measure to document psycho-social vulnerability. Fourth, for the first time, we examine shelter departure in addition to length of stay. Our rationale is that factors associated with length of stay (a continuous measure of days in a shelter) may differ from those associated with risk of departure (a dichotomous outcome of either saying or going on any given day).

Exploring both outcomes allows for a more comprehensive portrait of the psychosocial issues associated with shelter use and departure. Our study was guided by the following questions and hypotheses:

1. Do men who use a shelter for a first time in later life (50+) stay longer than men who use a shelter for a first time in young to mid-adulthood (younger than age 50)?

We hypothesize that older clients stay longer in the shelter and are less likely to depart from shelter than younger clients.

2. What are the patterns of departure amongst the older men and what factors are associated with departure?

We hypothesize that psychosocial factors associated with shelter stay and departure will differ for older and younger clients.

Method

Setting and context

This study used administrative data gathered in partnership with a major homeless service provider in Montreal, Canada. Montreal is a large urban city with a diverse metropolitan population of 3.8 million people, and like many large urban centers, has a fairly large and diverse homeless population. While accurate measures of individuals occupying positions on the spectrum of homelessness are unavailable for Montreal, a 1996/1997 survey found that approximately 28,214 people in Montreal used shelters, soup kitchens and stay centers for homeless people. Of these respondents, 12,666 indicated that they lacked a permanent fixed address in the previous year (Chevalier & Fournier, 2009).

Canada's response to homelessness is premised on the *Housing First* (HF) approach, as outlined in the 2014 renewal of the Homeless Partnering Strategy of the federal government (Employment and Social Development Canada, 2013). HF aims to provide immediate housing to persons identified as chronically or recurrently homeless. Once housed, other forms of support such as linkages to mental health, substance abuse, or community services are provided (Tsemberis, Gulcur, & Nakae, 2004). Canada's adoption of HF is based on *At Home/Chez Soi*, a nationwide demonstration project operating between 2008 and 2013 that compared HF to traditional service approaches in the five cities of Montreal, Toronto, Winnipeg, Moncton, and Vancouver. As in HF, the *At Home/Chex Soi model* specifically targets people who are chronically and episodically homeless (Goering et al., 2014). The shift towards HF for chronically or episodically homeless persons, suggests that shelters can be expected to continue to be the first-stop for the first-time homeless who are not the target population of the HF strategy.

The service provider (hereafter referred to as the agency) where our research was carried out has a number of pavilions and apartments that correspond with programming. It is the largest homeless shelter for men in the province of Quebec and the largest homeless shelter for women in Canada. In 2013, the agency delivered over 269,000 meals and provided some 118,000 overnight stays in its emergency shelters and transition units. Programs were provided as part of transitional programming which offered daytime access to the shelter, an assigned bed for the duration of their stay, as well as an assigned case manager. Transitional programs have been designed to provide a maximum of six months of services, but in some cases serve a clientele that are more chronically homeless, some of whom are older men.

Participants

The study population included adult men who experienced first time homelessness, which was defined as the first time the person had presented themselves for service at this shelter. Upon admission, workers entered data into the Homeless Individuals and Families Information System (HIFIS) software system. HIFIS is part of Canada's National Homelessness Information System (NHIS) – a federal data development initiative designed to collect and analyze baseline data on the use of shelters in Canada. For this study, the research team worked with the service provider to extract the data from the complex relational database. Files were merged and variables recoded to develop the database for analysis. Our sample was restricted to those who stayed at the men's shelter for the first time between July 2009 and September 2011. Over this time period 1,214 men enrolled in the transition programs at the agency. The purpose of the agency's two transitional housing programs is to provide the support needed for clients to re-establish independent living. The first program named *Etape* is geared toward stabilization and accessing eligible benefits; the second program named *Escale* provides autonomous living arrangements inside the shelter. Importantly, participants in the *Escale* program are required to pay rent¹. The age range of these 1,214 men was 18 to 76. The study received ethics approval from McMaster University and the McGill University Research Ethics Board (file # 235-1210).

¹ Efforts have been made by the shelter to align their transitional programs with the Housing First strategy.

Measurement

The data analyzed for this study were derived during the intake and initial enrollment at the shelter. At the agency, the general process of enrollment involves meeting with a case manager. The first meeting includes a basic psychosocial assessment where the client and worker discuss the cause(s) of the homeless condition, current and future needs, and plans to end their homelessness.

Psychosocial Vulnerability

During the initial meeting, the client and caseworker complete a modified version of the Arizona Self-Sufficiency Matrix (SSM) (Culhane, Parker, Poppe, Gross, & Sykes, 2007). The SSM is an assessment tool that is used to understand the complex psychosocial-economic issues experienced by homeless people. The instrument captures many of the dimensions found to be associated with homelessness for adult men and/or older adults (Crane et al., 2005; Crane & Warnes, 2010; Peressini, 2007) thus allowing us to get a detailed portrait of the psychosocial factors that may affect their trajectories. Our study used ten items from the original matrix: income, education, legal issues, life skills, mental health, substance use, family, mobility, community involvement, and safety, with the agency opting to omit items such as food and housing that were not considered relevant in a shelter environment. With regards to aging, the life skills element is akin to the ability to perform activities of daily living—a level of functioning that is typically used to establish older adults' eligibility for gerontological services (Huxley, Evans, Munroe, & Cestari, 2008). Community involvement can be considered an operationalization of social engagement, a commonly cited protective factor for 'aging well' (Gray, 2009). Mobility represents access to viable and appropriate transportation,

one of the most commonly identified concerns for older people in Canada and the U.S. (Turcotte & Schellenberg, 2007; U.S. Department of Transportation, 2013).

Each item of the SSM contains five ordinal responses. The items are scored from one to five, with 1 indicating more severe problems and five indicating higher functioning. For more information on scoring see Appendix A. The SSM has demonstrated reliability in another large sample (Cronbach's $\alpha = .81$) (Culhane, Parker, Poppe, Gross, & Sykes, 2007). A correlation matrix of the SSM variables is provided in Appendix B. To our knowledge, there is limited research on the scale consistency across dimensions in the SSM. In other words it is not clear whether an increase from a score of two to three on one dimension (e.g., education) is consistent to the same increase on another dimension (e.g., legal). As such, we took a conservative approach to treat the SSM as vulnerability by creating a dichotomous cutoff. To score the SSM as a vulnerability index we followed the guidelines for the SSM (Abt. Associates Inc., 2006) and established a dichotomous *vulnerability* cutoff score of 2. A score of two or less on the original scale indicates severe vulnerability on the measured dimension. A score greater than two on the original scale indicates less vulnerability which we coded as 0 for absence of vulnerability. Further, we validated this vulnerability threshold with shelter staff who confirmed the appropriateness of the cutoffs. Using mobility as an example, if a client scored 1 (“No access to transportation, public or private”) or 2 (“Transportation is available, but unreliable, unpredictable, unaffordable; may have car but no insurance, license, etc.”) on the original scale they were considered vulnerable on this item and given a score of 1. If they scored 3 (“transportation is reliable and available”); 4 (“basic travel needs are met”) or 5 (“in addition to 4, transportation is affordable and adequately

insured”) on the original scale they were considered to be absent of vulnerability on this item and given a score of 0.

Operationalizing Age

Based on a growing consensus in research on aging and on homelessness, we used the age of 50 as a marker of homelessness among older people (Gonyea et al., 2010; Grenier et al., in press). Age at first stay in the shelter was transformed into a binary variable, generating two groups: those fifty years of age or greater, and those 49 and under.

Covariates

In addition to the SSM variables and age we extracted both language (French, English, other) and immigrant status from the HIFIS system. Language was coded as French = 1, other = 0. Immigrant was coded as 1= immigrant and non-citizen; 0 = Canadian citizen.

Dependent variables

We isolated two dependent variables that would help us to better understand patterns of service use. The first dependent variable was *total nights spent in shelter* during the first six months of a client's first stay. Length of stay is important to identify the profiles of men that tend to stay longer and might therefore benefit from longer term more complex intervention at the shelter. Other types of men tend to leave more quickly and may benefit from different services such as information about the local homeless and housing systems. We ran analyses with shorter (3 months) and longer time stay lengths (9 and 12 months), but for programmatic and empirical reasons the six months window was

the most appropriate option. Overall, 95% of cases with complete data exited the shelter within 180 days.

The second dependent variable, *shelter departure*, was used in the survival analysis. Homeless clients depart from the shelter for many reasons. Some men find independent housing, some transition back to a previous housing arrangement, others may be barred from the shelter, and some leave for unknown reasons. There are also a number of people who return to the shelter at a later point in time, or continue to use services through other programs such as the transitional programs or community supports. The episodic and cyclical nature of homelessness is well documented, but understanding length of stay and departure could play an important role in refining the types of services people receive, and when, so that they are better able to secure long-term housing and avoid falling into chronic patterns of homelessness and shelter use.

Analytical plan

To address our research questions, we compared bivariate means between older and younger homeless clients across the SSM items. Wilcoxon signed-rank test for differences in continuous means (number of days) and Pearson's chi-squared tests for differences in proportions (SSM variables) were run to understand differences between the two age groups. We then conducted a survival analysis using a Cox proportional hazard model. Survival analysis is a form of multivariate regression that is useful for *time-to-event* analysis (Kalbfleisch & Prentice, 2011). We were primarily interested in the relationship between the SSM variables and the likelihood of exiting the shelter on a given day. In addition to age and SSM variables, language and immigration status were included as covariates. The model can be written as:

$$[H(t) = H_0(t) \exp(\beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 \dots \dots + \beta_k X_k)]$$

Where $H_0(t)$ is the baseline hazard of leaving the shelter at time t and $X_1 \dots X_k$ represents a set of independent variables that are hypothesized to be related to shelter departure. After dividing each side of the equation by $H_0(t)$ and taking the natural log, the dependent variable becomes $H(t) / H_0(t)$, i.e., the risk of leaving the shelter. Coefficients $\beta_1 \dots \beta_k$ were estimated with Cox proportional hazard regression in Stata 13. Estimates are presented as hazard ratios which represent the risk of leaving the shelter for each independent variable X_1 , at any time, holding the other covariates constant. Standard errors were estimated with 100 bootstrap replications. Survival analysis is useful here because the procedure allows us to account for censored variables. In the case of homeless shelter stays, those who did not leave the shelter within 180 days were censored in the analysis. Leaving out these observations, as would be the case in an ordinary least squares regression, would result in the loss of important information. In the Cox proportional hazard model, clients were considered at risk of shelter departure until they left the shelter or were censored. Clients who were “censored” remained at the shelter and continued to receive services after the study time period (180 days in this study) expired.

Results

In response to the first research question, we found that older men ($n = 301$) had statistically significant longer stays ($p < .01$) when compared to younger men $F(1, 212) = 38.21$ (See Table 1). The median length of stay of the older group was 39 days compared to a median length of stay of 25 days in the younger sample (mean stay length was 63 (SD = 60.21) for older, compared to 41 (SD = 47.52) for younger). Table 1 shows that

immigrants comprised a greater proportion of the younger group (15%) compared to the older group (7%). We see several differences across age groups for vulnerability. First, younger men with an income vulnerability rate of 79% were statistically significantly higher than the older men group at 66% ($\chi^2=18.03, p < .01$). Second, there was a statistically significant difference across age groups in the proportion of men who experienced community vulnerability on the community involvement dimension of the scale (37% for the older group compared to 28% for the younger group).

[insert Table 1 here]

Patterns of shelter use

The finding that older men stay between two and three weeks longer than younger men demonstrates that the homeless experience for older adults is different than younger adults. However, our first analysis was only bivariate and did not control for multiple influences. In order to better understand and target interventions, we were interested in exploring how age might be related to shelter stay after holding psycho-social vulnerabilities constant. Thus, the next step was to examine shelter patterns in a multivariate framework. One option was to estimate an OLS linear regression model predicting total days spent in the shelter. We found that older age was related to a longer stay length of about 23 days ($b = 22.89, s.e. = 3.75, t = 6.10, p < .001$). However, this approach was problematic for at least two reasons. First, the distribution of the total days in shelter was strongly positively skewed and thus violated the assumption of normal distribution for the dependent variable. Second, clients who never left the shelter during the study time frame were included in the analysis, despite the possibility that they never

actually left the shelter. Results from models examining stay length are not presented here but available upon request.

As a stronger approach, we exploited the time dimension of the data and focused on the likelihood of shelter departure on a given day. The key advantages of survival analysis include maximizing the time-to-event nature of the data and inclusion of censored data in the analysis. A list-wise deletion of cases with items missing resulted in a loss of $n = 181$ observations. Because our primary interest was in understanding differences in shelter departure patterns between the older and younger men, we first tested the equality of survivor functions across age groups. The log-rank test was statistically significant ($\chi^2 = 26.95, p < .01$) meaning that the survival distributions of the two groups were different. Figure 1 shows the Kaplan-Meier survival estimates over time across older and younger men. At no point in the study time frame did the 95% confidence intervals for age groups overlap. Our results from both the statistical test and the graphical presentation reveal that, across time, older men had a statistically significant lower likelihood of leaving the shelter—a finding that is extremely important in terms of recognizing the challenges that may exist for older men, and adapting services to better meet their needs.

[Insert Figure 1 Here]

A cox proportional hazard was then used to model shelter departure within 180 days using client age and the ten SSM indicators of vulnerability as covariates. The dependent variable *time to shelter departure* had an average of 47 days (SD = 51.61); median = 29. The model (see Table 2) was statistically significantly different than a null model ($\chi^2 = 59.26, p < .01$). Visual plots using the Schoenfeld and scaled-Schoenfeld

residuals as well as statistical tests confirmed the proportionality assumption was upheld ($\chi^2 = 22.45, p < .05$).

Several observations are noteworthy in Table 2. On any given day, older men, compared to younger men, were less likely to leave the shelter (expressed as a hazard ratio (H.R.) this quantity was .65 ($p < .01$)). The hazard ratios are interpreted as ratios of incidence rates. Therefore, on any given day, .35 as many older adults departed proportionally to the younger group. Three SSM variables were related to shelter departure, in both positive and negative directions. Men with income vulnerability were much less likely to leave the shelter on any given day—an important finding where policy and programming are concerned. To be specific, men with income vulnerability were at a 17% reduced risk for shelter departure (H.R. = 0.83). On the contrary, two types of vulnerability - substance use and family – were associated with an increased risk of shelter departure. Substance abuse vulnerability had the strongest association (H.R. = 1.43). This is not surprising, as actively using substances while seeking services is not permitted. Men with family vulnerability were also more likely to depart (H.R. = 1.16), suggesting that clients with stronger social support are perhaps more likely to engage with services at the shelter. A sum vulnerability variable was tested but was not statistically significant and did not change the substantive meaning of the Table 2 results (results not shown, available upon request).

[Insert Table 2 Here]

To more explicitly test our second hypothesis, we built on Table 2 results by examining interactions between age and vulnerabilities. These analyses helped us understand the types and magnitudes of risk of shelter departure specifically for the older

homeless group. An additional 10 models were analyzed that included all combinations of age and vulnerability indicators (results not shown but available upon request). Table 3 reports only the interactions that met criteria for statistical significance ($p < .05$). Models displayed similar fit characteristics as the base model reported in Table 2. Table 3 Model 1 highlights the interaction between age and legal vulnerability. We see the relationship between older men and shelter departure was affected by legal vulnerability (H.R. = 1.59). In other words, older men with outstanding legal problems had sizeably increased risk of shelter departure. Model 2 showed how the relationship between age and shelter exit was affected by mobility vulnerability (H.R. = 1.42 $p < .05$), with persons with mobility issues less likely to leave the shelter.

[Insert Table 3 Here]

Discussion

Summary of Main Findings

Our study results show that older men, who are new to homelessness, are at heightened risk of remaining in a shelter relative to their younger counterparts. More specifically, older men spend on average two weeks longer in a shelter and have a higher probability of remaining in that shelter each day than younger adults. Given the research design, the results provide some of the strongest evidence documenting a pattern of prolonged length of stay for older newly homeless men in North America.

Our study further suggests that particular psycho-social profiles significantly impact the pattern of shelter use amongst older men who use a shelter for the first time in old age. Older men with pending legal and mobility (transportation) issues face a sizably higher risk of departing the shelter on any given day than older men without these issues.

Older homeless men with legal vulnerability – defined as outstanding or current legal involvement or noncompliance – may leave the shelter for a variety of reasons. It is plausible that clients with this vulnerability leave to address their legal concerns, including possible incarceration. Importantly, SSM measure does not distinguish between types of crime, e.g., violent versus non-violent. The positive relationship between mobility vulnerability and age is somewhat counterintuitive: we would expect the opposite, i.e., that older clients without transportation would be more likely to stay in the shelter until securing transportation. Montreal has a well-developed public transportation system of buses and metros. However, we speculate the system may be unaffordable for older homeless men. Single passes are now \$3.25 and the Transport Society of Montreal offers a relative 40% discount on monthly transit passes for persons aged 65 and older.

Substance abuse was a strong predictor of shelter departure in the overall model (Table 2), which is not surprising. Many shelters have no tolerance policies for substance use. Importantly, the interaction between substance abuse and age was not statistically significant – suggesting the statistically significant finding reported in Table 2 is driven mostly by younger clients. This is particularly interesting as both younger and older men have about the same rates of substance use vulnerability (18% for younger and 20% for older, see Table 1).

Overall, these issues or risk factors and their associated patterns of shelter use are unique to older men compared to younger men, suggesting that older men are a vulnerable yet diverse group with psycho-social issues that warrant specific policy and practice attention. Considering these findings in relation to the context of service gaps and policy issues leads us to identify both potential reasons for such patterns, but also

important challenges in addressing the needs of older men who become homeless for the first time after age 50.

Policy and Practice Implications

While our findings do not speak to service use beyond the shelter system, they hold important implications for how shelter workers and administrators may better predict older men's likelihood of staying in a given shelter and respond accordingly. They also raise questions about the policy initiatives that do not include specific strategies for older adults, and approaches that uniformly shift funding from shelters or other emergency homeless services to stable housing. In particular, the most significant findings of legal and transportation vulnerability increasing risk of shelter departure for older men point to a need for particular types of support that are not usually integrated into HF such as access to low cost transportation, subsidized legal services, and a case manager to link older adults new to homelessness to these services.

The increased length of stay noted in our study also suggests that shelter workers and administrators are pivotal resources for many older men new to homelessness as they are in a position to form relational connections that could support successful linkages to other required services. For older men with limited family and community connections, for example, shelter workers may actively facilitate connections with gerontological services such as case management, social and recreational activities to create a stronger support network (Gonyea et al., 2010) a protective factor for chronic homelessness (Gelberg et al, 1990). This could be done by inviting representatives of publically funded home care services, or not for profit community based services into the shelter to meet older men before they depart, offering joint meetings and discussions about services and

providing some follow up beyond the shelter to ensure connections have been made and sustained (Gilbody, Bower, Fletcher et al., 2006; Pauzé, Gagné, & Paulter, 2005; Shibusawa & Padgett, 2009). More than a system navigator, the shelter worker would also be positioned to help older adults new to homelessness grapple with the emotional reactions that may cause further distress and interfere with accepting assistance (e.g., feeling one is no longer successful; fearing that accepting ongoing help means one needs to accept a position of neediness; Snow and Anderson, 1993). Identifying and developing this type of relational connection requires that services providers in both sectors (the shelter system and gerontological services) receive training that challenges their views around aging, homelessness and the intersection of the two (Crane & Warnes, 2007).

Our findings also suggest that not all older men who enter the shelter system can be expected to stay for long periods. Men with limited transportation options or pending legal issues may be expected to have shortened length of stays. We expect that these patterns do not suggest these men are exiting homelessness earlier, but rather have complexities that shelters may be less able to address. In these instances we suggest immediate targeted information and referral upon shelter entry to the combination of legal services for low-income adults, specialized legal services for older adults, viable housing options, transportation services and community based case management (also see McDonald et al, 2007). While necessary, we expect these shorter term shelter-based interventions may be insufficient to avert chronic homelessness, especially for men with legal issues who face many challenges to re-housing (Caton et al., 2005; Davis-Berman,

2011). More work is needed to explore the unique experiences of this group of newly homeless older men and develop practice approaches specific to their needs.

Shifts in policies that govern homeless and gerontological services also appear warranted. HF policies that are now prevalent throughout North America, for example, aim to channel funding to long-term housing rather than the crisis response services provided through shelters and emergency health care (Tsemberis, Gulcur, & Nakae, 2004). While funding for viable housing options for older adults with different psycho-social challenges is imperative (especially for older men with mobility limitations, mental health challenges and criminal records) three issues emerge. First, long term safe and affordable housing must be available for older people. Second, HF must be accompanied by the specific types of supports that are needed by older people. These could be related to health care, psycho-social needs or adapted spaces. Third, policies and associated funding formulas should also ensure that shelters and other emergency community based services are financially equipped to develop practices that encourage successful linkages to appropriate ongoing supportive services that can facilitate housing resettlement.

Improved coordination between shelter systems and gerontological services also requires a shift in eligibility criteria. Currently, eligibility is available for adults aged 60-65+ in most jurisdictions across North America. Our research findings affirm that around age 50 is a time in which age begins to play a role in homeless trajectories and may represent a more accurate threshold for accessing community services for older adults, including subsidized supportive housing, ongoing case management and social/recreational services (Grenier et al., In Press; also see Gonyea et al., 2010; Ploeg,

Hayward, Woodward, & Johnston, R., 2008)². Without such a change in eligibility for service provision, shared care between gerontological services and homeless shelters will not be possible for many at risk homeless men.

Perhaps most important, our research suggests that older men new to homelessness are a vulnerable yet diverse group who require unique strategies and services. National, State/Provincial/Territorial and Municipal policies on homelessness must make this group visible in their proposed frameworks and action plans. Quebec's 2014 National Policy on Homelessness may represent an example of a policy that recognizes the complexities of homelessness in old age. Unique both within Canada and the United States, the policy identifies older adults as a vulnerable group and emphasizes the need for a continuum of housing and support services which could include more comprehensive supportive both within and beyond the shelter walls (see Barken et al, 2015). It will be important to monitor the extent to which the continuum of housing and support are realized in the province and to study the impact of the Quebec model on older adults new to homelessness over time.

Limitations

We acknowledge the methodological limitations of this study. First, the study does not measure changes over time in the SSM variables. We assume that SSM variables are time variant. As such, the findings are associational and do not indicate causality. With a large sample size, we assume the findings here have a reasonable level of external validity to other urban settings. However, the limited or unavailable data on

² The US Older American Act uses age 60. In Canada, where no such act exists, there is a tendency to use the official age for eligibility of public pension (65).

the population of homeless men means that we cannot investigate this empirically. Our data do not include seasonal variations. This may or may not be influential as some research has pointed to seasonal effects in shelter stays (Culhane & Kuhn, 1998), while others have found the magnitude of seasons to be minimal (O’Flaherty & Wu, 2008). Last, we acknowledge that clients may have been homeless for some time before seeking services at the agency. Clients may have stayed at other shelters in Montreal or elsewhere. As such, it is possible that not all the clients that presented at this agency were homeless for the first time.

Implications for Research

Understanding the potential for a positive/‘successful’ departure, and the type of departure, is a critical next step in future research. It will be important to have accurate data on the available housing options for older people in particular regions, and to track the nature of the transition out of the shelter. Specifically, we want to know: did the client depart for independent living, another shelter, incarceration, hospitalization, continued homelessness or other? Were they able to secure housing, and for how long? If not, what happened, and how can we intervene to ensure long-term housing? Future work can improve our understanding by exploring and testing underlying latent factors associated with shelter stay and other dependent variables of interest. It should also focus on differences that may exist in the trajectories into and out of homelessness, as experienced by groups at varying social locations (e.g., gender, education, ethno-cultural minority status, health/impairment, etc.) (Grenier et al., In Press). Income, precarious work and patterns of low pension contributions for example, may, in combination with psychosocial factors, provide insight into men’s homelessness in late life. The HIFIS

system can play a major role in the next steps of research aimed to understand these trajectories. Discussions are underway between shelter providers in Montreal and other parts of Canada to explore how to coordinate and share data across shelters using the HIFIS platform.

Conclusion

We demonstrate that older men who become homeless in later life have unique psychosocial needs in relation to younger homeless men, and that these vulnerabilities impact shelter use. Understanding how different challenges – such as legal and mobility vulnerabilities – may impact tendencies to stay or leave the shelter system can provide service providers, administrators and decision-makers with important directions on when, where, and how to address the particular issues that render older homeless men vulnerable to remaining homeless for extended periods of time.

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Table 1

Description of the sample by older and younger clients

	N	Younger <i>n</i> = 913	Older <i>n</i> = 301	Test statistic
Days in shelter	1214	25	39	38.21***
Age	1214	37	55	1541.29***
French language	1214	55%	54%	.12
Immigrant	1207	15%	7%	14.48***
<i>Vulnerability type</i>				
Income	1207	79%	66%	18.03***
Education	1210	17%	21%	1.9
Legal	1209	13%	13%	.03
Life skills	1211	35%	35%	.01
Mental health	1212	12%	13%	.16
Substance use	1209	18%	20%	.47
Family	1209	61%	59%	.33
Mobility	1209	38%	35%	.91
Community	1201	28%	37%	8.46**
Safety	1204	19%	22%	1.63

Note. Median reported for continuous variables. N is the number of non-missing values. Tests used: Wilcoxon test for continuous variables; χ^2 Pearson test for categorical variables. ** $p < 0.01$; *** $p < 0.001$

Table 2	
<i>Cox proportional hazard model of shelter departure</i>	
Variable	Hazard ratio
Older	0.654*** [0.554,0.771]
French language	1.125 [0.997,1.269]
Immigrant	0.955 [0.806,1.132]
<i>Vulnerability type</i>	
Income	0.828* [0.686,0.999]
Education	1.031 [0.861,1.235]
Legal	0.914 [0.712,1.174]
Life skills	1.036 [0.898,1.195]
Mental health	1.026 [0.824,1.277]
Substance use	1.427*** [1.229,1.658]
Family	1.155* [1.021,1.306]
Mobility	1.030 [0.886,1.198]
Community	0.865 [0.743,1.006]
Safety	1.103 [0.926,1.315]
<i>N</i>	1021

Note. Total number of events = 1,021 and censored = 56, resulting in 5% censored. Standard errors estimated from 100 bootstrap replications. Exponentiated coefficients; 95% confidence intervals in brackets. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 3

Cox proportional hazard model of shelter departure with selected interactions

Variable	Model 1	Model 2
Older	0.616*** [0.526,0.721]	0.583*** [0.493,0.689]
French language	1.123 [0.987,1.277]	1.131 [0.997,1.283]
Immigrant	0.957 [0.796,1.149]	0.956 [0.808,1.131]
<i>Vulnerability type</i>		
Income	0.828* [0.701,0.977]	0.832* [0.715,0.969]
Education	1.038 [0.840,1.284]	1.033 [0.859,1.244]
Legal	0.824 [0.632,1.073]	0.914 [0.738,1.132]
Life skills	1.035 [0.913,1.174]	1.035 [0.898,1.193]
Mental health	1.038 [0.847,1.273]	1.039 [0.848,1.274]
Substance use	1.436*** [1.220,1.691]	1.430*** [1.183,1.728]
Family	1.159* [1.013,1.327]	1.153* [1.000,1.328]
Mobility	1.032 [0.891,1.195]	0.954 [0.808,1.126]
Community	0.863* [0.749,0.994]	0.863 [0.731,1.018]
Safety	1.099 [0.887,1.360]	1.105 [0.921,1.326]
Older * legal	1.589* [1.070,2.359]	
Older * mobility		1.422* [1.066,1.897]
<i>N</i>	1021	1021

Note. Total number of events = 1,021 and censored = 56, resulting in 5% censored.

Standard errors estimated from 100 bootstrap replications. Exponentiated coefficients; 95% confidence intervals in brackets. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

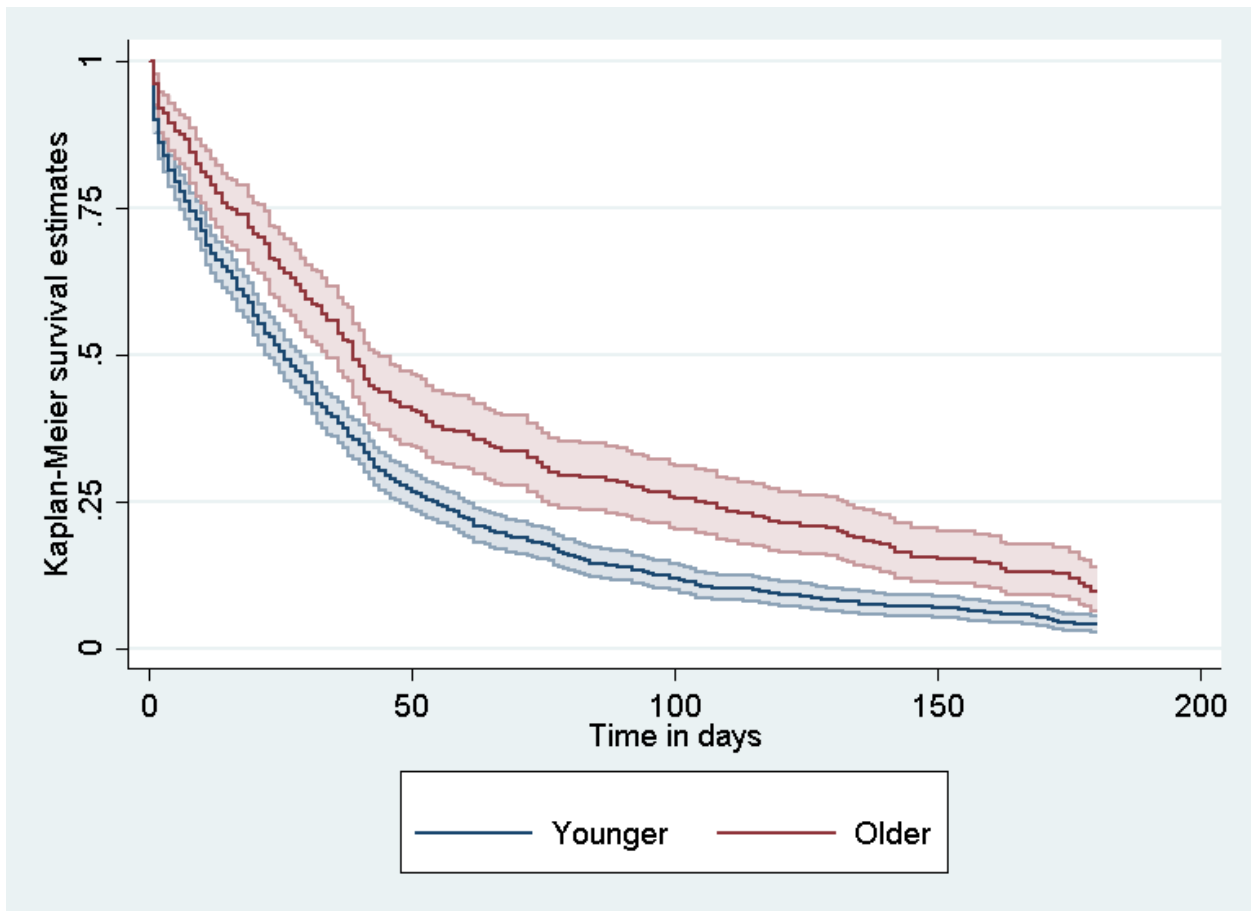


Figure 1. Graph of the survivor function for shelter stay across older and younger homeless male clients.