# Retirement Decision-Making among Registered Nurses and Allied Health Professionals: A Descriptive Analysis of Canadian Longitudinal Study on Aging Data

Décision de retraite chez les infirmières autorisées et les professionnels paramédicaux : analyse descriptive d'une étude longitudinale canadienne sur le vieillissement



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#### Abstract

A population's health is dependent on the availability of skilled health professionals. We know little about retirement decision-making among publicly employed Canadian registered nurses (RNs) and allied health professionals (AHPs). We identified and compared factors reported to influence early versus 65+ retirement decisions among RNs (n = 794) and AHPs (n = 393). RNs, on average, retired at 58.1 years and AHPs at 59.4 years. More than two thirds retired before age 65. Among RNs, caregiving demands predict early retirement – policies supporting employed RN caregivers may reduce early workforce exits among publicly employed RNs.

#### Résumé

La santé d'une population est tributaire de la disponibilité de professionnels de la santé compétents. On connaît peu de chose sur la prise de décision en matière de retraite chez les infirmières autorisées (IA) et les professionnels paramédicaux (PP). Nous avons identifié et comparé des facteurs qui ont une influence sur la prise de retraite précoce ou à plus de 65 ans chez les IA (n = 794) et les PP (n = 393). En moyenne, les IA ont pris leur retraite à 58,1 ans et les PP à 59,4 ans. Plus des deux tiers ont pris leur retraite avant 65 ans. Parmi les IA, les obligations d'aidant naturel sont un indice de retraite précoce – des politiques de soutien pour les IA proches aidantes pourraient réduire la perte précoce de main-d'œuvre parmi les IA employées par l'État.

HE FOUNDATION OF A HEALTH SYSTEM IS ITS WORKFORCE (ORGANISATION FOR Economic Co-operation and Development [OECD] 2016). A recent report projected a global deficit of skilled health professionals of 12.9 million by 2035 (Global Health Workforce Alliance and World Health Organization 2014). The aim of health workforce planning is to achieve short- and long-term balance between supply and demand of diverse health workers (Ono et al. 2013). To date, most workforce projections have focused on anticipating supply and demand for physicians and nurses (Amorim Lopes et al. 2015).

A primary barrier to sophisticated analysis of supply is a lack of information; workforce data deficits make system-wide planning impossible. Despite the strategic importance of effective health human resource management, the topic has received little attention in Canadian health policy research and academic literature (Wranik 2008).

In 2017, 301,010 registered nurses (RNs) were licensed to practice in Canada (Canadian Institute for Health Information [CIHI] 2018). RNs typically retire before the standard age of retirement (OECD 2016; Ono et al. 2013). In 2016, more than 10,500 allied health professionals (AHPs) were employed across Canada (CIHI 2017). We have defined AHPs as healthcare providers with a minimum of a required baccalaureate degree (e.g., pharmacists, dietitians, physiotherapists). Data on AHP supply and demand are limited (Solomon et al. 2015).

The purpose of this project, broadly, was to characterize retirement decision-making among publicly employed Canadian RNs and AHPs between the ages of 45 and 85 years in the interest of informing both workforce planning and development of targeted employment and social development policy. In this descriptive paper, we aim to provide Canadian workforce planners and health administrators with current, empirically derived average ages of retirement and average expected ages of retirement for RNs and AHPs. In addition, we aim to highlight factors associated with retirement decision-making among RNs and AHPs and cross-profession differences in approaches to retirement decision-making.

## Methods

Data for this descriptive analysis were drawn from the Tracking and Comprehensive data sets of the Canadian Longitudinal Study on Aging (CLSA) (Raina et al. 2009). Baseline data (Wave 1) were collected between 2011 and 2015 (CLSA n.d.). A single researcher reviewed text entries (English and French) to occupation-related questions to identify those in the included professions. Respondents commonly reported profession simply as "nurse." We included only those respondents who we were reasonably certain were RNs. Specifically, this meant that we included only those who either 1) explicitly identified themselves as RNs or 2) identified themselves as a nurse and had a baccalaureate level of education (minimum).

Participants who reported self-employment or retail employment were removed from the sample, as the objective was to provide information of direct relevance to administrators of Canada's public healthcare system. In some cases, setting was unclear – "health care" or "healthcare" were accepted in the absence of further detail.

#### Measures

The CLSA questionnaire determined age of retirement by asking, "How old were you when you first retired/partially retired?" Those not yet retired were asked, "At what age do you plan to retire?" For our purpose, early retirement was defined as retirement before the age of 65 years. Respondents were also asked, "There are many reasons why people retire. Which of the following reasons contributed to your decision to retire?" Contributing variables of financial possibility, desire to stop working, pension qualification, desire to pursue hobbies, spousal support, caregiving, organizational restructuring (including job elimination) and (dis) incentives to retire were identified for inclusion based on previously developed conceptual models (Hewko et al. 2018).

# Analysis

We conducted exploratory bivariate analyses using chi-square tests for comparison of independent proportions to explore differences across professional group and differences between early retirees and those who retired at age 65+. A respondent was deemed an early retiree if they had a valid response to the age of first retirement question and their response was less than 65 years.

#### Results

In total, 1,187 RNs and AHPs employed in the public system were included in the CLSA data set (Table 1, available online at longwoods.com/content/26074). "Other" AHPs include midwives, cardiac perfusionists, audiologists, radiation therapists and child life specialists. Notably, 70 respondents provided a valid response to the question related to age of retirement and to the question related to planned age of retirement. It is likely that these respondents had retired and then returned to the workforce – thus, for the latter question, they would be reporting their planned age for a second retirement.

Participating RNs (n = 794) retired significantly earlier than AHPs (n = 393) (58.1 vs. 59.4 years, p < 0.05). Across the allied health professions, average age of retirement (among those already retired) ranged from 55.8 among speech language pathologists to 60.3 among pharmacists (Table 2).

TABLE 2. Age of retirement (actual and planned) across professions

	n	No response for age of retirement or planned retirement age	Response for both age of retirement and planned retirement age	Age of retirement	Planned retirement age
				Age	Age
				Mean (SD)	Mean (SD)
Registered nurse (RN)	794	51	50	485	308
Age				58.1 (6.6)	61.6 (5.0)
Pharmacist	78	10	6	39	35
Age				60.3 (8.2)	62.8 (3.8)
Social worker (SW)	106	11	4	55	44
Age				59.7 (5.3)	62.2 (4.9)
Dietitian (RD)	44	7	0	16	21
Age				56.8 (7.0)	61.4 (2.9)
Occupational therapist (OT)	49	7	0	19	23
Age				59.2 (7.7)	61.8 (4.5)
Physiotherapist (PT)	76	11	6	35	36
Age				60.1 (5.3)	61.8 (5.0)
Speech language pathologist (SLP)	25	I	3	11	16
Age				55.8 (3.9)	61.8 (5.4)
Other AHP	15	0	I	2	14
Age				60.5 (.71)	62.7 (6.8)

Financial possibility and desire to stop working were the most frequently reported factors contributing to both early and 65+ retirement for RNs. Financial possibility was more often reported by those who had retired early, and the desire to stop working was more often reported by those who had retired at 65+. Agreement with spouse, caregiving requirements and organizational restructuring (including job elimination) were more frequently identified

as contributing to early rather than 65+ retirement. Sampled AHPs, regardless of retirement timing, were more likely than RNs to report that a desire to pursue hobbies contributed to their retirement decision (see Table 3).

TABLE 3. Factors contributing to retirements

	RI	N	АНР	
	Early	65+	Early	65+
Financial possibility§	197 (48%)	22 (31%)	71 (52%)	17 (43%)
Desire to stop working§	176 (43%)	37 (51%)	65 (47%)	24 (60%)
Qualify for pension	127 (31%)	20 (28%)	51 (37%)	18 (45%)
Desire to pursue hobbies*.1	113 (27%)	16 (22%)	53 (39%)	17 (43%)
Spousal support§	104 (25%)	7 (10%)	34 (25%)	6 (15%)
Caregiving§	71 (17%)	4 (6%)	20 (15%)	3 (8%)
Organizational restructuring§	54 (13%)	3 (4%)	14 (10%)	I (3%)
Employee incentives to retire	22 (5%)	3 (4%)	11 (8%)	2 (5%)

Respondents could select more than one factor as having contributed to their retirement.

#### Discussion

RNs and AHPs employed in Canada's public health system frequently retire early (Table 2) – in 2018, on average, Canadians retired at age 64 years. In the public sector, broadly, the average retirement age was 62 years (Statistics Canada 2019). The profession-specific average ages of retirement may be valuable to workforce planners seeking to increase the accuracy of Canadian workforce planning model(s). In many of these professions, current supply does not meet existing and/or predicted demand. Experienced professionals exhibit explicit and tacit professional skills acquired over the length of their career (Perera et al. 2015). They also make significant contributions to training those new in the profession.

Early-retiring RNs and AHPs were more likely than those who retired at 65+ to indicate that an agreement with their spouse, organizational restructuring (including job elimination) and/or caregiving requirements contributed to their decision to retire.

For pragmatic purposes, we will focus the discussion on organizational restructuring and caregiving responsibilities as contributors to early retirement; this is because potential mitigation strategies for these factors, which can be implemented by health administrators and/or policy makers, have been reported in the literature. Organizational restructuring, which often includes elimination of jobs, is frequently implemented in response to budgetary shortfalls. As healthcare is the most significant government expenditure in most high-income countries, the demand on healthcare systems to cut costs is unlikely to disappear (Burke et al. 2015). Older workers are frequently perceived to be more expensive than younger workers (Hennekam 2015), as they are more likely to be at the top of the pay scale. They can also cost more to insure (whether for on-the-job insurance, disability benefits and/or extended

 $<sup>^{*}</sup>p < 0.05$ , significant difference between early retiring RNs and AHPs.

 $<sup>{}^{\</sup>S}\!p < 0.05$ , significant difference between early retirees and 65+ retirees.

p < 0.05, significant difference between 65+ retiring RNs and AHPs.

medical benefits; e.g., see Bailey 2014). Burke et al. (2015) proposed that negative human resource effects (such as a surplus of early retirements) of organizational restructuring can be mitigated when efforts are made to facilitate collaboration between professional unions and hospital management. Effective, frequent communication throughout restructuring may also lessen the uncertainty and worry experienced by employees, increasing the likelihood that fewer will opt for early retirement when faced with restructuring (Burke et al. 2015).

Existing research indicates that those who leave the workforce to act as a caregiver often struggle to re-enter once they are no longer needed as a caregiver (Lilly 2011). The impact of caregiving on retirement decisions of older RNs and AHPs could be mitigated through adoption of caregiver-friendly policies at the institutional, provincial and/or federal level. Policy options may include legislation enforcing employee rights to flexible work arrangements (Mountford 2013), institution-level introduction of flexible work arrangements, subsidization of paid caregiving to support unpaid family caregivers and expansion of leave policies acknowledging employees' needs to care for aging family members (Glenn 2010; Lilly 2011).

## Limitations

Some of the respondents continued to work after retirement (or returned to it after a period of retirement), whether within or outside their profession. In this analysis, we looked exclusively at those who perceived themselves to be retired, regardless of whether they were currently working. A desire to continue working after retirement may have affected responses to specific questions (e.g., financial possibility).

Respondents' age ranged between 45 and 85 years – their responses to questions such as household income and number of children living at home reflected present circumstances and not necessarily their circumstances at the time of retirement.

Selection of eligible respondents was based on free-text responses to questions about employment. As a result, there was a possibility for human error, either/both at the data entry or/and the selection stage. It is possible that we failed to include RNs with less than a baccalaureate degree (if they indicated only "nurse" as occupation) and/or that we incorrectly included care aides and/or licensed practical nurses with a baccalaureate degree in a field other than nursing. In addition, as setting of employment was a free-text variable, it is possible that RNs/AHPs employed outside of the public sector were included.

Although the use of samples recruited using rigorous protocols to achieve national representativeness can maximize generalizability, the sampling frame for the CLSA was not specifically designed to ensure representativeness within individual professions or across settings of employment. We did compare the gender proportions within professions of our sample to those reported in CIHI resources and found them to be very similar (CIHI 2017). In addition, the proportion of respondents in our sample, as compared to total profession-specific population (as reported in CIHI [2017] for 2013), was consistently near 0.3%, indicating that no one profession was over-represented. In future, studies using survey data

to explore retirement decision-making among RNs and AHPs should aim to maximize representativeness across employment setting, province of residence, age, gender/sex and profession.

Last, in this descriptive analysis, we conducted bivariate comparisons, which do not correct for confounding. We have published additional analyses that account for potential confounding (Hewko et al. 2019).

#### Conclusions

Canadian RNs and AHPs retire well before 65 years. Average ages of retirement, by profession, may be of value to workforce planners. It will be important for administrators to consider long-term impacts of cost-cutting measures on the labour pool of skilled health professionals. Austerity measures provoking a disproportionate reduction in older, experienced professionals are likely short sighted. Clear communication surrounding organizational restructuring may extend the work lives of health professionals.

Policies supporting flexible work arrangements, expansion of paid-leave benefits and subsidization of caregiving services for employees may reduce the incidence of workforce exits triggered by caregiving demands. More research is needed to better understand the reasons for differences between the relative importance of specific factors on retirement decision-making, both between RNs and AHPs and between early and 65+ retirees.

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