The webinar, “**The early retiree divests the workforce: A quantitative analysis of early retirement among health professionals using CLSA data**,” will begin shortly.

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Land Acknowledgement

The National Coordinating Centre of the Canadian Longitudinal Study on Aging (CLSA) is located on the traditional territories of the Mississauga and Haudenosaunee Nations, and within the lands protected by the Dish With One Spoon wampum agreement.

CLSA Webinar Series

The early retiree divests the workforce: A quantitative analysis of early retirement among health professionals using CLSA data

Dr. Sarah Hewko, RD, MHA, PhD
University of Prince Edward Island

12 pm to 1 pm ET | January 29, 2020

Despite shortages of health professionals, we know little about voluntary and involuntary exits from the workforce among Canadian Registered Nurses (RNs) and allied health professionals (AHPs). We used Canadian Longitudinal Study on Aging data to: 1) identify and compare factors reported to influence retirement decision-making among RNs/AHPs; 2) explore the relative importance of factors on early vs. “on-time” retirement among RNs/AHPs; and 3) empirically test conceptual models of early and involuntary retirement among RNs and AHPs. In this webinar, Dr. Hewko will discuss results of the study and implications for RN/AHP workforce policy.

Dr. Sarah Hewko is an assistant professor in the Department of Applied Human Sciences at the University of Prince Edward Island. She is a registered dietitian with more than ten years of clinical experience. Her primary interest is in health human resources and, in her program of research, she seeks to better understand what keeps Canadian allied health professionals (AHPs) in their jobs and the impacts of AHP continuity on patient outcomes.

Webinars will be broadcast using WebEx.
Further instructions will be sent by email.

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The early retiree divests the workforce: A quantitative analysis of early retirement among health professionals

Sarah Hewko, RD MHA PhD
University of Prince Edward Island
Jan 29, 2020

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DISCLOSURE

The authors certify that they have no affiliation with any organization/entity with a financial or non-financial interest in the subject matter of this research.

OUTLINE

STUDY OBJECTIVES

METHODS

RESULTS

SO WHAT?

NEXT STEPS

QUESTIONS

OBJECTIVES

1) To develop and validate conceptual models of early and involuntary retirement among Registered Nurses (RNs) and Allied Health Professionals (AHPs)
2) To identify and compare factors reported to influence retirement decisions among RNs/AHPs

OBJECTIVES

3) To explore the relative importance of factors that influence early retirement and on-time or “late” retirement among publicly-employed RNs and AHPs

4) To quantitatively test conceptual models of early and involuntary retirement among publicly-employed RNs and AHPs

OBJECTIVES

5) To assess model fit and association of identified variables with either early or involuntary retirement across occupational groups

6) To identify and discuss implications for RN and AHP workforce policy

METHODS - THEORY

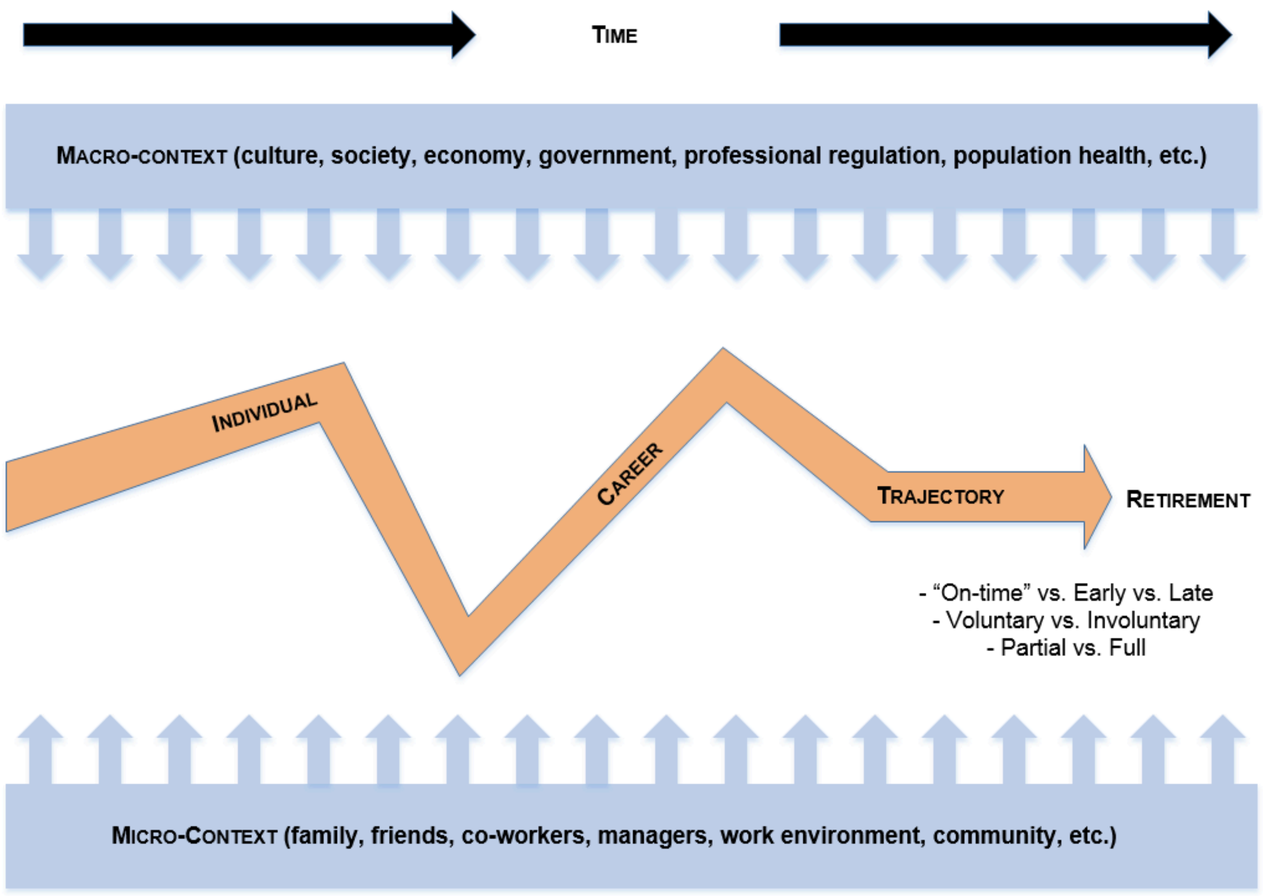
Life Course Perspective

Adopted because:

1) Employment-related decisions intertwine significantly with many other decisions during the life course

2) Perspective is inherently interdisciplinary – incorporates concepts and learnings from economics, anthropology, developmental psychology, demography and sociology

3) Encourages researchers to consider micro-, meso- and macro-level factors



Adapted from Devine et al., 1998 and Sobal et al., 2006

METHODS – DATA SOURCE

- Study will follow 50,000 randomly selected Canadians between the ages of 45 and 85 years over 20 years
  - Waves of data collection will occur every three years
- Two cohorts
  - 30,000 in a comprehensive cohort
    - Complete face-to-face interviews and site visits
  - 20,000 in tracking cohort
    - Complete telephone interviews
- Survey questions related to demographics, health status, health behaviours, physical ability and status, psychological/mental health, socioeconomic status and participation in the workforce

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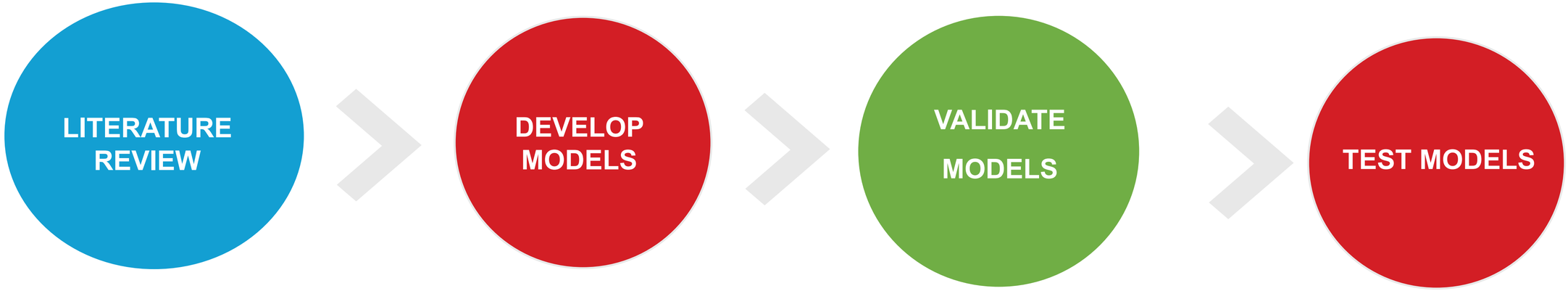
Transforming Everyday Life into Extraordinary Ideas

Transformer la vie quotidienne en idées extraordinaires

METHODS



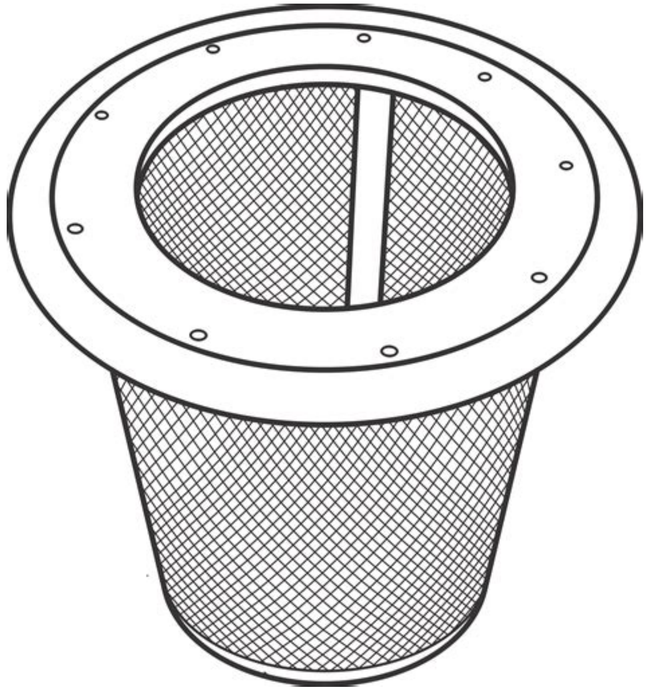
n = 23 studies

Interviewed n =14 current and former health professionals between 45–85 yrs

Participant demographics				
Gender	100% female			
Retired	50%			
Age		RNs	AHPs	Total
	45-54	1	3	4
	55-64	1	4	5
	65-74	1	4	5
	75-85	1	0	1
Province				
	Alberta			3
	British Columbia			7
	Manitoba			1
	Ontario			3
Profession				
	Clinical Social Worker			1
	Occupational Therapist			1
	Pharmacist			1
	Physiotherapist			3
	Radiation Therapist			1
	Registered Dietitian			2
	Registered Nurse			4
	Speech Language Pathologist			1

METHODS – DATA CLEANING

- Identified RNs and AHPs in the sample
  - Free text variable(s) – longest job, most recent pre-retirement job
- Identify those employed in the public system
  - Free text variable (Setting)



METHODS – MODEL TESTING

LOGISTIC REGRESSION

- Exploratory data analysis – identify outliers, distribution, variance
  - Very minimal missing data
- Correlations
  - Pearson, with Bonferroni correction
- Collinearity
  - Variance Inflation Factor
- Non-stepwise, unconditional, multivariate logistic regression
  - For early retirement model – ran a separate model for RNs and and AHPs
    - Optimal for effective comparison
  - For involuntary retirement model – single model in a blended sample of RNs and AHPs

RESULTS

TABLE 2: Age of retirement (actual and planned) across profession

	n	No response for age of retirement or planned retirement age	Response for both age of retirement & planned retirement age	Age of retirement Age (Mean (SD)	Planned retirement age Age (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	1	3	11	16
Age				55.8 (3.9)	61.8 (5.4)
Other AHP	15	0	1	2	14
Age				60.5 (.71)	62.7 (6.8)

Hewko SJ, Reay T, Estabrooks CA, Cummings GG. (In Press). Retirement decision-making among Registered Nurses' and allied health professionals: A descriptive analysis of Canadian Longitudinal Study on Aging. *Healthcare Policy*

RESULTS

TABLE 3: Factors contributing to retirements[a]

	RN		AHP	
	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*‡	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%)	1 (3%)
Employee incentives to retire	22 (5%)	3 (4%)	11 (8%)	2 (5%)

[a] Respondents could select >1 factor as having contributed to their retirement
* $p<.05$, significant difference between **early** retiring RNs and AHPs
‡ $p<.05$, significant difference between **65+** retiring RNs and AHPs
† $p<.05$, significant difference between early retirees and 65+ retirees

Hewko SJ, Reay T, Estabrooks CA, Cummings GG. (In Press). Retirement decision-making among Registered Nurses' and allied health professionals: A descriptive analysis of Canadian Longitudinal Study on Aging. *Healthcare Policy*

RESULTS

Workplace (or work) characteristics:

- Recognition of older workers' skills, knowledge & experience
- Frequent/pervasive change (technological, structural etc.)
- Job design promoting good health/ job satisfaction
- Opportunities for flexible hours/seasons of work
- Age discrimination and stigma
- Training/developmental opportunities

Sociodemographics

- Level of education
- Marital status
- Dependent child
- Sex
- Ethnicity
- Financial security
- Eligibility to retire with full benefits/pension
- Total household income
- Occupation
- Employment status (full or part-time)

Attitudes and beliefs

- "Tired of work"
- Desire for leisure
- Personal views of retirement
- Organizational commitment
- Job satisfaction
- Occupational commitment

Broader context

- Age – by generational cohort
- Region of residence

Organizational factors

- Retirement (dis)incentives
- Potential for and/or implementation of organizational restructuring

Family

- Spouse/partner's:
  - Retirement status
  - Health
  - Support of retirement
- Caregiving responsibilities
- Family views of retirement

Lifestyle and health

- Health status (mental and physical)
- Weight status
- Disability
- Physically active

Work-related

- Work setting – hospital, primary care, residential care, nursing home
- Hours of work – part-time vs. full-time
- Shift patterns
- Occupational tenure
- Organizational tenure

→ Early Retirement

Hewko SJ, Reay T, Estabrooks CA, Cummings GG. (2018). Conceptual models of early and involuntary retirement among Canadian registered nurses and allied health professionals. Canadian Journal on Aging. 37(3): 294-308

RESULTS

Table 4 Logistic regression results (RN and AHP)

	RN model					AHP model				
	Odds ratio	Bootstrap standard error	*z*	95% CI lower	95% CI upper	Odds ratio	Bootstrap standard error	*z*	95% CI lower	95% CI upper
Constant	35 176.77	57 963.31	6.35*	1 392.08	888 884.70	10 156.86	22 202.72	4.22*	139.97	737 006.90
Age (at time of data collection)	*.86*	.02	– 6.44*	.82	.90	*.89*	.02	– 4.64*	.85	.94
Household income	*1.61*	.35	2.20*	1.05	2.47	1.00	.23	.01	.65	1.56
Factors contributing to retirement decision										
Financial possibility	*2.49*	.84	2.71*	1.29	4.82	2.35	1.24	1.61	.83	6.63
Pension eligibility	.68	.35	– .75	.25	1.87	.72	.32	– .073	.30	1.73
"Tired of work"	*.49*	.17	– 2.04*	.25	.97	.54	.38	– .88	.14	2.12
Pursuit of hobbies	1.05	.54	.10	.38	2.85	.64	.39	– .73	.19	2.13
Retirement (dis)incentives	1.40	.88	.54	.41	4.82	1.79	1.15	.91	.51	6.29
Organizational restructuring	*3.94*	2.68	2.02*	1.04	14.96	*5.59*	3.85	2.50*	1.45	21.58
Agreement with spouse	2.15	1.18	1.40	.74	6.28	1.85	1.30	.87	.46	7.34
Caregiving responsibilities	*7.60*	6.05	2.55*	1.59	36.17	2.68	2.75	.96	.36	20.03

RN model Log likelihood: – 137.91, Wald chi-square (10) = ($p < .001$), 43 replications, pseudo-$R^2 = .25$
AHP model Log likelihood: – 71.71, Wald chi-square (10) = ($p < .001$), 26 replications, pseudo-$R^2 = .19$
*$p < .05$
The italicized entries are the Odds Ratios associated with significant z scores

Hewko SJ, Reay T, Estabrooks CA, Cummings GG. (2019). The early retiree divests the health workforce: a quantitative analysis of early retirement among Canadian registered nurses and allied health professionals. *Human Resources for Health*. 17:49

RESULTS

	Z-score	Bootstrap Standard Error	Odds Ratio	95% CI Lower	95% CI Upper
General health	3.06*	.24	**1.58**	1.18	2.12
Chronic disease	.15	.16	1.02	.75	1.39
Caregiving as a factor in retirement	—.87	.37	.56	.16	2.03
Occupation	—2.48*	.14	**.24**	.08	.74
Constant	—1.10	.33	.43	.10	1.92

Log likelihood = —122.12 49 replications, Wald X^2 (4) = 24.51 ($p<.05$), pseudo R^2 = .08

* $p<.05$

Hewko SJ, Reay T, Estabrooks CA, Cummings GG. *Manuscript in preparation.*

RESULTS

- RNs and AHPs were largely in agreement re: the clarity, logic and relevance of the conceptual models of early and involuntary retirement among health professionals
- Average age of RN retirement (58.1 years) was significantly lower than that of AHPs (59.4 years)
- Financial possibility and desire to stop working were among the most frequently reported factors contributing to early and on-time or “late” retirement among RNs and AHPs

@Sarah_Hewko

RESULTS

- 85% of RNs and 77% of AHPs retired early
- Model of early retirement, as tested, explained a maximum of 25% of variance
- RNs and AHPs whose retirement decision had been influenced by organizational restructuring were more likely to have retired early
- RNs with caregiving responsibilities were more likely to retire early

@Sarah_Hewko

CONCLUSION

- Registered Nurses (RNs) and Allied Health Professionals (AHPs) consider many factors when contemplating early retirement
- Much remains to be known about publicly employed RN and AHP pathways to retirement
  - Particularly about involuntary retirement
- The conceptual models have only been partially tested – further quantitative testing is needed

@Sarah_Hewko

Administrative & Policy Implications

- Strategies to reduce rates of early retirement among RNs and AHPs include:
  - Reducing the frequency of restructuring in health care
    - Or, at minimum, improving the implementation and management of restructuring efforts
  - Legislated expansion of paid leave policies to those providing informal care
  - Subsidization of caregiving support for would-be caregivers wishing to remain in the work force
- Work-based interventions proven to improve self-rated health may reduce the rate of RN/AHP involuntary retirement

@Sarah_Hewko

NEXT STEPS

@Sarah_Hewko

QUESTIONS?

The **CIHR Institute of Aging** has partnered with the **McMaster Institute for Research on Aging (MIRA)** to host an innovative five-day training event:

SAVE THE DATE

Summer Program in Aging

Longitudinal Studies on Aging: Understanding Health Span and Longevity

A unique, interactive training program, SPA will run from June 7-12, 2020 at the **Hockley Valley Resort**, approximately one hour north of Toronto, Ontario.

Graduate students and postdoctoral fellows either working with or interested in learning more about research related to the area of longitudinal studies in aging are encouraged to apply. Trainees will have the opportunity to participate in advanced training that crosses disciplines and brings together trainees, researchers, and members of the public and private sector from Canada and abroad.

The program will feature internationally renowned guest speakers, and networking opportunities will be offered throughout the week. The program is expected to be launched in January 2020 on CIHR's ResearchNet. More information will be available in the coming weeks.

Hosted by

CIHR IRSC Institute of Aging Institut du vieillissement

McMaster University Institute for Research on Aging

June 7-12, 2020

Upcoming CLSA Webinar

Sarcopenia in the CLSA: The impact of diagnostic criteria on the agreement between definitions and the association of sarcopenia with falls

Alexandra Mayhew, PhD

February 19, 2020 | 12 p.m. ET

Register: bit.ly/clsawebinars