| **SUPPLEMENTAL FILE 3: Conceptual and Operational variables** | | | | | | |
| --- | --- | --- | --- | --- | --- | --- |
| **Variable** | **Theoretical definition** | **Operational definition** | **CLSA variable** | **Question(s)** | **Type of variable** | **Direction,**  **sub-set of literature, citations** |
| **Predictor variables** |  |  |  |  |  |  |
| Age – generational cohorts | An individual’s age places them within a specific generational cohort. Each generational group is believed to have shared “experiences that mold specific preferences, expectations, beliefs and work style.”([Carlson and Deloitte & Touche, n.d.](#_ENREF_6)) | Age, according to generational cohorts. Those between the ages of 44-46 are classified as Generation Xers, those 47-65 as Baby Boomers, and those >66 as Traditionalists. | AGE\_NMBR\_TRM | What is your age?  Will be derived | Categorical (ordinal) | +  General Retirement (Wang & Schultz 2010; Jones & McIntosh 2010; George et al. 2009)  Conceptual – Life Course Perspective (Elder Jr. 1994) |
| Caregiving | “The act of providing unpaid assistance and support to family members or acquaintances who have physical, psychological, or developmental needs”([Drentea, 2007](#_ENREF_8)) | For those that have already retired, self-report that “providing care to a family member or friend” contributed to their decision to retire. For those not yet retired, self-report that the “need to provide care to a family member” will influence their decision to retire. | RET\_WHY\_PR\_TRM,  RET\_WHYR\_PC\_TRM | There are many reasons why people retire. Which of the following reasons contributed to your decision to retire?  There are many reasons why people retire. Which of the following are likely to be the reasons you retire? | Binary – Y/N | +  General Retirement (McDonald & Donahue 2011)  +  Early retirement (Ferreira de Macedo et al 2014) |
| Changes in work situation | Notable alteration in an individual’s work situation. | For those that have already retired, self-report that “organizational restructuring or job elimination” contributed to their decision to retire. For those not yet retired, self-report that “job ending and not wanting to start offer” will likely be a reason for retirement. | RET\_WHY\_OR\_TRM, RPL\_WHYR\_JE\_TRM | There are many reasons why people retire. Which of the following reasons contributed to your decision to retire?  There are many reasons why people retire. Which of the following are likely to be the reasons you retire? | Binary – Y/N | —  Early Retirement (Boumans et al. 2008) |
| Chronic disease | These “diseases are not passed from person to person. They are of long duration and generally slow progression. The four main types of noncommunicable diseases are cardiovascular diseases (like heart attacks and stroke), cancers, chronic respiratory diseases (such as chronic obstructed pulmonary disease and asthma) and diabetes.”([World Health Organization, 2015c](#_ENREF_20)) | Self-report of one, two or three or more chronic conditions in the categories of osteoarthritis, arthritis, respiratory, cardiac, cardiovascular, neurological, gastrointestinal, vision, cancer, mental health, other | CCT\_F1\_TRM | Derived – has at least one chronic condition. Self-report (“Has a doctor ever told you…”) | Categorical (ordinal) | +  Involuntary retirement (van Rijn et al 2013) |
| Dependent child | One or more persons, under the age of 18, living in the home of the respondent ([Canada Revenue Agency, 2015](#_ENREF_3)) | Self-report of one or more persons under the age of 18 living in the respondent’s household. | SN\_LIVH\_NB\_TRM | How many people, not including yourself, live in your household?   1. What is the relationships of person #2 to you? 2. What is the sex of person #2? 3. How old is person #2? Etc. | Categorical (ordinal)  - One  - Two-three  - One or more | **~**  General Retirement (Wang & Schultz 2010; Weaver 1994) |
| Disability | “Disabilities is an umbrella term, covering impairments, activity limitations, and participation restrictions. An impairment is a problem in body function or structure; an activity limitation is a difficulty encountered by an individual in executing a task or action; while a participation restriction is a problem experienced by an individual in involvement in life situations”([World Health Organization, n.d.](#_ENREF_21)) | TBD – possibility of a summative disability score in the database | TBD – will likely include the respondents’ OARS scale: Instrumental and Basic Activities of Daily Living Classification (ADL\_DCLS\_TRM) | TBD | TBD – likely binary | +  General Retirement (Fereira de Macedo et al. 2014) |
| Ethnicity | “Ethnic or cultural origins of the respondent's ancestors”([Canada, 2013](#_ENREF_5)) | Self-reported ethnic or cultural ancestry. | SDC\_3 | To which ethnic or cultural groups did your ancestors belong? | Categorical (nominal)  Will derive by collapsing (e.g. Eastern European, Western European, Chinese, Hebrew, Aboriginal, South Asian, Other/Canadian) | **~**  Early Retirement (Juliá et al 1995) |
| Financially secure  Meet requirements for full pension/superannuation access | Individual or family group has the “income necessary to cover basic expenses without relying on public subsidies.” They have adequate finances “to cover basic expenses, plan for important life events like college or save for emergencies like unexpected health bills.”  Individual has met the program-specific requirements to access their private pension (or similar resource) | For those that have already retired, self-report that either “completing the required years of service to qualify for pension” or that “retirement was financially possible” contributed to their decision to retire. For those not yet retired, self-report that the respondent’s “adequate retirement income (e.g. pensions and investments)” will influence their decision to retire. | RET\_WHY\_CM\_TRM, RET\_WHY\_RE\_TRM, RET\_WHYR\_AR\_TRM  I will derive – those marked as Y will have answered Yes to one (or more) of the CLSA variables listed above | There are many reasons why people retire. Which of the following reasons contributed to your decision to retire?  There are many reasons why people retire. Which of the following are likely to be the reasons you retire? | Binary – Y/N | +  General retirement  (Valencia & Raingruber 2010; Duffield et al. 2015)  ~  General Retirement  (Wang & Schultz 2010)  +  Early retirement (Keele & Alpert 2013; Cyr 2005; Blakely & Ribeiro 2008) |
| General (**good**) health | “Good health is a state of complete physical, social and mental well-being, and not merely the absence of disease or infirmity. Health is a resource for everyday life, not the object of living, and is a positive concept emphasizing social and personal resources as well as physical capabilities.”([World Health Organization, 2015b](#_ENREF_19)) | Self-reported health as being either excellent, very good, good, fair or poor | GEN\_HLTH\_TRM | In general, would you say your health is excellent, very good, good, fair, or poor | Categorical (ordinal) | —  General retirement (Topa et al. 2009; Topa et al. 2011; Wang & Schultz 2010; Ferreira de Macedo et al. 2014; Duffield et al. 2015)  —  Early Retirement (van Rijn et al 2013; Mcdonald & Donahue 2011; van den Berg et al 2010; Ferreira de Macedo; Boumans et al 2008; Cyr 2005; Friis et al. 2007)  —  Involuntary Retirement (van Rijn et al. 2013) |
| Household income | Total annual income, before taxes and deductions, in the respondent’s household | Self-reported, estimated total household income (range) received by all household members, from all sources, before taxes and deductions within the last 12 months. | INC\_TOT\_TRM | What is your best estimate of the total household income received by all household members, from all sources, before taxes and deductions, in the past 12 months? | Categorical (ordinal) | When higher:  —  General Retirement (Topa et al 2011; Armstrong-Stassen 2005)  **~**  Early Retirement  (Friis et al 2007) |
| Level of education | “A construct based on the assumption that education programmes can be grouped into an ordered series of categories. These categories represent broad steps of educational progression in terms of the complexity of educational content. The more advanced the programme, the higher the level of education.”([UNESCO Institute for Statistics, 2012](#_ENREF_16)) | Self-reported highest level of education with options including no post-secondary degree, certificate, or diploma; trade certificate or diploma from a vocational school or apprenticeship training; non-university certificate or diploma; university certificate below a bachelor’s level; bachelor’s degree; university degree or certificate above bachelor’s degree | ED\_OTED\_TRM  ED\_HIGH\_TRM | Have you received any other education that could be counted towards a degree, certificate, or diploma from an educational institution?  What is the highest degree, certificate, or diploma you have obtained? | Categorical (ordinal) | **~**  General Retirement (Wang & Schultz 2010)  +  General Retirement  (George et al. 2009) |
| Marital status | “A person’s situation as regards being single, married, divorced, etc.”([2005](#_ENREF_1)) | Respondent’s self-reported relationship status | SDC\_MRTL\_TRM | What is your current marital/partner status | Categorical (nominal)  Will analyze as binary Married/living with a partner vs. single, widowed, divorced, separated | **~**  General retirement (Wang & Schultz 2010)  +  Early retirement (Ferreira de Macedo et al. 2014; Friis et al. 2007; Boumans et al. 2008) |
| Mental health | “A state of well-being in which every individual realizes his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to her or his community.”([World Health Organization, 2014](#_ENREF_17)) | Self-reported mental health as being either excellent, very good, good, fair or poor | GEN\_MNTL\_TRM | In general, would you say your mental health is excellent, very good, good, fair, or poor? | Categorical (ordinal) | When poor: +  General Retirement (Topa et al. 2009; Topa et al. 2011; Wang & Schultz 2010)  +  Involuntary retirement  (van Rijn et al. 2013) |
| Musculoskeletal disorder | “Any injury, damage or disorder of the joints or other tissues in the upper/lower limbs or the back.”([Health and Safety Executive, n.d.](#_ENREF_11)) | Self-report of a doctor having told the respondent that they have either (or more than one of) osteoarthritis of the knee/hip/hand(s), rheumatoid arthritis, other form of arthritis. | CCT\_OAKNEE\_TRM, CCT\_OAHIP\_TRM, CCT\_OAHAND\_TRM, CCT\_RA\_TRM, CCT\_OTART\_TRM  I will have to derive this variable | Osteoarthritis: Has a doctor ever told you that you have osteoarthritis in the knee/hip/one or both hands?  Arthritis: Has a doctor ever told you that you have rheumatoid arthritis/any other type of arthritis? | Binary –  Will be categorized as Y if the respondents indicated Y to any (or more than one) of the questions | +  Involuntary Retirement (van Rijn et al. 2013) |
| Occupation | “A collection of jobs, sufficiently similar in work performed to be grouped under a common label for classification purposes.”([Canada, 2012](#_ENREF_4)) | Self-reported occupation at longest job worked over the respondent’s lifetime, as coded according to the “nationally accepted taxonomy and organizational framework of occupations in the Canadian labour market (Statistics Canada 2012) | LBF\_LGTYPE\_SP\_TRM | 3131 Pharmacist  3132 Dietitians and Nutritionists  3141 Audiologists and SLPs  3142 Physiotherapists  3143 Occupational Therapists  3012 Registered nurses and registered psychiatric nurses  3233 Licensed practical nurses  4152 Social worker (can’t pull out only medical)  3413 Nurse aides, orderlies and patient service associates  3215 Medical radiation technologists (can’t pull out radiation therapists)  3214 Respiratory therapists, clinical perfusionists and cardiopulmonary technologists (can’t pull out perfusionists)  0311 Managers in health care (can’t specify allied health) |  | **~** |
| Perceived spousal support | “An individual’s subjective, evaluative assessment of his or her social support network. Examples of subjective appraisals include satisfaction, feeling cared for, respected, or involved. These appraisals may be global, reflecting an evaluative synthesis of a person’s relationship with” their spouse “or a particular type of support (e.g. emotional or instrumental)” (Chronister et al. 2006) | For those that have already retired, self-report that an agreement with their spouse or partner contributed to their decision to retire. For those not yet retired, self-report that the respondent’s spouse or partner will/has pressure(d) them to continue or stop working will/has influence their decision to retire/remain working. | RET\_HYE\_AG\_TRM RPL\_INFSP\_PS\_TRM | There are many reasons why people retire. Which of the following reasons contributed to your decision to retire?  Sometimes people’s reasons for retirement are influenced by their spouse or partner. Which of the following will likely influence your retirement? | Binary – Y/N | +  General Retirement (McDonald & Donahue 2011; Wang & Schultz 2010) |
| Primary work setting | Primary setting of work at longest job held in respondent’s lifetime. | Self-report of business or industry sector of the longest job the respondent had worked at. | LBF\_LGIND\_SP\_TRM | What business or industry sector were you in?  Derived variable using the Industrial Classification System  (2012):  622 – Hospitals  6232 – Residential developmental handicap, mental health and substance abuse facilities  62110 - primary care  623110 – nursing care facilities | Categorical (nominal) | Depends on setting; reference is hospital:  — Primary care  + Residential institutions  + Nursing homes  Early Retirement (Friis et al. 2007) |
| Province/territory of residence at recruitment | Region of Canada in which an individual resides at the time of the survey | Self-reported province or territory in which the respondent’s health care number was issued, classified: Alberta/British Columbia, Manitoba/Saskatchewan, Ontario, Québec or the Maritimes | WGHTS\_PROV\_TRM | For which province or territory is your health care number? | Categorical (nominal) | **United States**:  + (depending on reference)  General Retirement  (George et al. 2009)  Conceptual – Life Course Perspective (Elder Jr. 1994) |
| Pursuit of leisure/personal interests | Pursuit of activities that are “neither work nor necessary activity”([Kelly, 1972](#_ENREF_12)) | For those that have already retired, self-report that a wish “to pursue hobbies or other activities of personal interest” contributed to their decision to retire. For those not yet retired, indication in “Other” that a probably reason for their retirement will be a desire to pursue hobbies or other activities of personal interest. | RET\_WHY\_HO\_TRM, RPL\_WHYR\_OTSP\_TRM | There are many reasons why people retire. Which of the following reasons contributed to your decision to retire?  There are many reasons why people retire. Which of the following are likely to be the reasons you retire? | Binary – Y or N  More sticky due to lack of complementary statement in possible/future reason to retire | +  Early Retirement (Blakely & Ribeiro 2008; Boumans et al. 2008) |
| Respiratory illness | “Chronic respiratory diseases (CRDs) are diseases of the airways and other structures of the lung. Some of the most common are chronic obstructive pulmonary disease (COPD), asthma, occupational lung diseases and pulmonary hypertension.”([World Health Organization, 2015a](#_ENREF_18)) | Self-report of a doctor having told the respondent that they have either (or more than one of) asthma, emphysema, chronic bronchitis, COPD, chronic changes in lungs due to smoking. | CCT\_ASTHM\_TRM, CCT\_COPD\_TRM  I will have to derive this variable | Asthma: Has a doctor ever told you that you have asthma?  Other: Has a doctor told you that you have/had any of the following: emphysema, chronic bronchitis, COPD, or chronic changes in lungs due to smoking? | Binary –  Will be categorized as Y if the respondents indicated Y to either or both of the questions. | +  Involuntary Retirement (van Rijn et al. 2013) |
| Retirement incentives | A thing or things that encourage or motivate an individual ([2005](#_ENREF_1)) to retire before the age of 65 years. | For those that have already retired, self-report that “employer offered special incentives to retirement” contributed to their decision to retire. For those not yet retired, self-report that the respondent’s early retirement policies of their employer will influence their decision to retire. | RET\_WHY\_IN\_TRM, RPL\_WHYR\_EP\_TRM | There are many reasons why people retire. Which of the following reasons contributed to your decision to retire?  There are many reasons why people retire. Which of the following are likely to be the reasons you retire? | Binary – Y/N | +  General Retirement (Armstrong-Stassen 2005)  +  Early Retirement (Blakely & Ribeiro 2008) |
| Sex | “The characteristics that differentiate males and females in most plants and animals” (Taber’s Cyclopedic Medical Dictionary) | Self-reported sex – either male or female | SEX\_ASK\_TRM | Are you male or female? | Categorical (binary) | If female:  +  General Retirement  (Schofield et al. 2007; Jones & McIntosh 2010)  +  Early Retirement  (Boumans et al. 2008)  —  Involuntary Retirement (Gleeson & Gallagher 2005) |
| Spouse retired | Husband/wife or common-law partner has had a perceptible reduction in working hours and income ([Beehr, 2014](#_ENREF_2)) and an increasing psychological separation from work ([Beehr, 2014](#_ENREF_2), [Dubois and Dussault, 2002](#_ENREF_9), [Elwood, 2013](#_ENREF_10)) | Self-report of spouse/partner as retired | RET\_SPSE\_TRM | Is your spouse/partner retired? | Binary – Y/N | +  General Retirement (McDonald & Donahue 2011; Weaver 1994; Wang & Schultz 2010; Duffield et al. 2015)  +  Early Retirement (Friis et al. 2007; Blakely & Ribeiro 2008) |
| “Tired of work” | To date, “no systematic efforts to define this…precisely” (Jex & Britt 2014). The sense that one’s time at work has “come to an end”([2005](#_ENREF_1)) | For those that have already retired, self-report that wanting to stop working contributed to their decision to retire. For those not yet retired, self-report that the respondent’s desire to stop working will influence their decision to retire. | RET\_WHY\_ST\_TRM, RPL\_WHYR\_WS\_TRM | There are many reasons why people retire. Which of the following reasons contributed to your decision to retire?  There are many reasons why people retire. Which of the following are likely to be the reasons you retire? | Binary – Y/N | +  General Retirement (Wang & Schultz 2010)  +  Early Retirement (Blakely & Ribeiro 2008) |
| Weight status | “Classification of weight, accounting for height, into the categories determining the presence and degree of obesity”([Mull, 2013](#_ENREF_14)) | “Body Mass Index (BMI) is a simple index of weight-for-height that is commonly used to classify underweight, overweight and obesity in adults.” (WHO, 2006) Classifications are Underweight (<18.5), Normal (18.5-24.99), Overweight (>25.00), Obese (>30.0) | HWT\_DISW\_TRM | Derived variable using the questions: How tall are you without shoes on (decimal)? How much do you weigh (decimal)? And Was that in pounds or kilograms? | Categorical (ordinal)  \*Plan to collapse to Underweight/Normal, Overweight and Obese | Overweight:  +  Early Retirement (Friis et al. 2007)  +  Involuntary Retirement (Robroek et al. 2013)  Obesity:  +  Involuntary Retirement (Robroek et al. 2013) |
| Work hours | Classification of employed persons according to hours worked at their primary or only job, where >30 hours is considered full-time and <30 hours is considered part-time([Statistics Canada, 2010](#_ENREF_15)) | For those already retired, self-report of work hours in longest job, with options of >30 hours per week, between 20-30 hours per week and less than 20 hours per week. For those yet to retire, self-report of current working hours, with identical options. | LBF\_LGSTAT\_TRM, LBF\_STTS\_TRM | Thinking of the job you worked at the longest, what was your working status in that job? If you were self-employed, choose full-time or part-time as appropriate/  What is your current working status? If self-employed, choose full-time or part-time, as appropriate. | Binary –  Will derive to full-time (>30) and part-time (<30 hours). | Full-time:  +  General Retirement  (George et al. 2009) |
| Work pattern | Pattern of hours of work | Self-reported work schedule, with options of daytime, evening, night, rotating, seasonal. | LBF\_SCHD\_TRM  LBF\_LGSCHD\_TRM | Which of the following best describes your working schedule?  Which of the following best describes your working schedule in that (longest) job? Daytime, evening, night, rotating, seasonal | Categorical (ordinal) | +  Early Retirement (Friis et al. 2007) |
| Workplace (or work) characteristics |  | Self-report that characteristics of, or experiences in, the workplace have or will influence the decision to retire | RET\_WHY\_OTSP\_TRM  RET\_WHYR\_OTSP\_TRM | There are many reasons why people retire. Which of the following reasons contributed to your decision to retire?  There are many reasons why people retire. Which of the following are likely to be the reasons you retire? | Binary – Y/N | When negative:  +  General Retirement (Topa et al. 2009; Wang & Schultz 2010; Armstrong-Stassen 2005; Lagacé et al. 2010; Valencia & Raingruber 2010)  +  Early Retirement  (Ferreira de Macêdo et al. 2014; Wang & Schultz 2010; Friis et al. 1007; Blakely & Ribeiro 2008; Boumans et al. 2008; Cyr 2005) |
| **Outcome variables** |  |  |  |  |  |  |
| Early retirement | Occurs when an individual exits employment below the age of 65 and receives private pension benefit([Mulders et al., 2015](#_ENREF_13)) | Self-reported age of retirement (either having already occurred or occurring in future) below 65 years | Will be derived from RET\_AGE\_NB\_TRM and RPL\_AGE\_NB\_TRM | Has already occurred: How old were you when you first retired/partly retired?  Planned: At what age do you plan to retire? | Binary – early or on-time/late |  |
| Involuntary retirement | Occurs when an individual perceives that they have no control over their retirement decision([Denton et al., 2013](#_ENREF_7)) | Self-reported involuntary retirement | RET\_VOLUN\_TRM | Would you say your retirement was voluntary, that is, you retired when you wanted to? | Binary – voluntary or involuntary |  |

***Legend***: Citations in **purple** are from the general retirement literature (broader population – reviews only); those in **blue** are from the nursing literature incorporating all available reviews and individual studies from 2005-present; those in **green** are from the allied health literature (no date restriction)

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