The Canadian Longitudinal Study on Aging: Design Overview, Milestones, and Participant Characteristics at Baseline

Susan Kirkland, PhD
Dalhousie University

Christina Wolfson, Parminder Raina, and the CLSA Research Team

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Population Aging in Canada

- Canadians are living longer and older people are making up a larger share of the population
- 1 in 6 Canadians (16%) are 65 or older
- By 2025 1 in 5 (20%, 8M) will be over 65
Life expectancy continues to increase by about 2 years per decade
At age 65: Women 21.6 years (86.6)
At age 65: Men 18.5 years (83.5)
Challenge: Live long AND well

Need to shift our focus:

- Mortality
- Morbidity
- Longevity

- Function
- Ability/Disability
- Well being
- Quality of life
- Autonomy/Independence
The Canadian Longitudinal Study on Aging (CLSA)

- Team of 3 principal investigators, more than 160 co-investigators from 26 institutions
- Involves experts from a wide range of disciplines - biology, genetics, medicine, psychology, sociology, economics, epidemiology, nutrition, health services
- Largest study of its kind to date in Canada
- An epidemiologist’s dream!
Design Overview

50,000 women and men aged 45 – 85 living in the community at baseline

Tracking (20,000)
Randomly selected
10 provinces

Comprehensive (30,000)
Randomly selected
25-50 km of 11 sites in 7 provinces

Questionnaire
• By telephone (CATI)

Questionnaire
• In person, in home (CAPI)

Physical Assessments
Blood, Urine
• At Data Collection Site

20 year study: Full follow up every 3 years, maintaining contact in between

Data Linkage
National Scope
Representative Sampling Frame

- Home Interviews & Data Collection Site Visits
- Telephone Interviews
CLSA covers a wide range of aspects relevant to aging

- DEMOGRAPHIC
  - Education
  - Marital status
  - Ethnicity

- HEALTH BEHAVIOURS
  - Smoking, alcohol
  - Nutritional risk
  - Food frequency
  - Physical activity
  - Health care utilization
  - Medication use
  - Supplement use
  - Sleep
  - Consumer products (assistive devices)

- HEALTH STATUS
  - General health
  - Women’s health
  - Chronic conditions, symptoms
  - Oral health
  - PHYSICAL
    - Injuries, falls
    - Mobility
    - Pain, discomfort
    - Functional status
    - ADL, IADL
    - Life space index
  - PSYCHOLOGICAL
    - Cognition—Executive function, memory, psychomotor speed
    - Depression
    - Mood
    - Psychological distress
    - Veteran identifier
    - Satisfaction with life
  - PTSD
  - SOCIAL
    - Social networks
    - Social support
    - Social participation
    - Online communication
    - Social inequality
    - Care receiving
    - Care giving
    - Retirement status
    - Labour force participation
    - Retirement planning
    - Transportation
    - Mobility, Migration
    - Built environments
    - Home ownership
CLSA Data Collection
Data Collection Site

Physical Assessments:
- Height, Weight, BMI
- Bone Density, Body Composition, Aortic Calcification
- Blood Pressure
- ECG
- Carotid Intimal-Medial Thickness
- Pulmonary Function
- Vision & Hearing
- Performance testing

Cognitive Assessments:
- Neuropsychological Battery
  - Memory
  - Executive function
  - Reaction time

Biospecimen Collection:
- Blood
- Urine
What you don’t get to see…
Data and Biospecimen Access

- **Fundamental tenets:**
  - The rights, privacy and consent of *participants* must be protected and respected at all times.
  - The confidentiality and security of *data and biospecimens* must be safeguarded at all times.
  - CLSA data and biospecimens are resources that will be used optimally to support research to benefit all Canadians.
  - Available to researchers at public institutions by applying to the CLSA Data and Sample Access Committee.
Milestones

• Recruited 51,338 participants
• Baseline data available for use by researchers
• Will finish the first follow up in Spring 2018
• 99 projects approved to date to use the CLSA data
The CLSA includes:

- Veterans
- Aboriginal peoples
- Francophone population
- Ethnic groups
- Urban and rural populations
- People living with chronic diseases
- Caregivers
- Retirees
Interesting facts about CLSA participants…

• 19% chose to be interviewed in French
• 84% live in a house
• 46% have a pet
• 93% voted in the last election
• 16% were born outside of Canada
• 23% use an assistive device for hearing, vision, mobility
• 40% say their health is excellent, 20% say their health is very good, 30% say their health is good, 10% say their health is fair or poor
• 86% are satisfied with their life
CLSA Research Team
Operations Committee and Scientific Leads
CLSA Funders and Partners
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THANK YOU!

Susan.Kirkland@dal.ca
www.clsa-elcv.ca