"Personal and Professional Reflections on Frailty"

VERSION FOR DISTRIBUTION:
CLINICAL IMAGES REMOVED

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Alberta Health Services

Ryerson University , Toronto. ON 2016-05 12 :11:15 -12:15

If we don't build it, they'll come anyway

http://www.huffingtonpost.ca/russell-williams/aging-population-problems-canada_b_8631236.html 2015-11-15

OVERVIEW

- Implications of Demographic changes in Canada for health care delivery
- Ways of defining Frailty.
- Challenges in Recognition and defining prevalence
- Uncertainty and Risk in Medicine- particularly in medicine of Old age
- The "Frailty Journey"
- Frailty and health care systems
- Frailty initiatives in other countries

Frailty-what is it?

“Frailty thy name is……”
Hamlet Act 1 Scene 2?

2001 Thriller movie ?

Bacon, Shelley & RW Service

An ill-defined, valuable concept

The Free Dictionary-On line

Noun

1.frailty

the state of being weak in health or body (especially from old age)

debility, feebleness, frailness, infirmity, valetudinarianism,unfitness, softness - poor physical condition; being out of shape or out of condition (as from a life of ease and luxury)asthenia, astheny - an abnormal loss of strength cachexia, cachexy, wasting

any general reduction in vitality and strength of body and mind resulting from a debilitating chronic disease

2. frailty

moral weakness

Vice, evilness, evil - the quality of being morally wrong in principle or practice; "attempts to explain the origin of evil in the world"

Frail and Frailty synonyms and near synonyms

- Failure to thrive
- Progressive Incapacity of aging
- Biologically older than their chronological age
- Functionally dependent
- Vulnerable
- Functionally disabled/dependent
- “At-risk”
- Fragile
- “Decrepitude”

Frail and Frailty antonyms

- Vitality,
- Resilient
- Capability
- Hale and hearty
- Hardiness
- Robustness
- Self-reliance
- Autonomous

1966
Watershed year for Aging in Canada

First Canadian Conference on Aging

January 1966 Toronto

Senate Report on Aging (Croll Report)

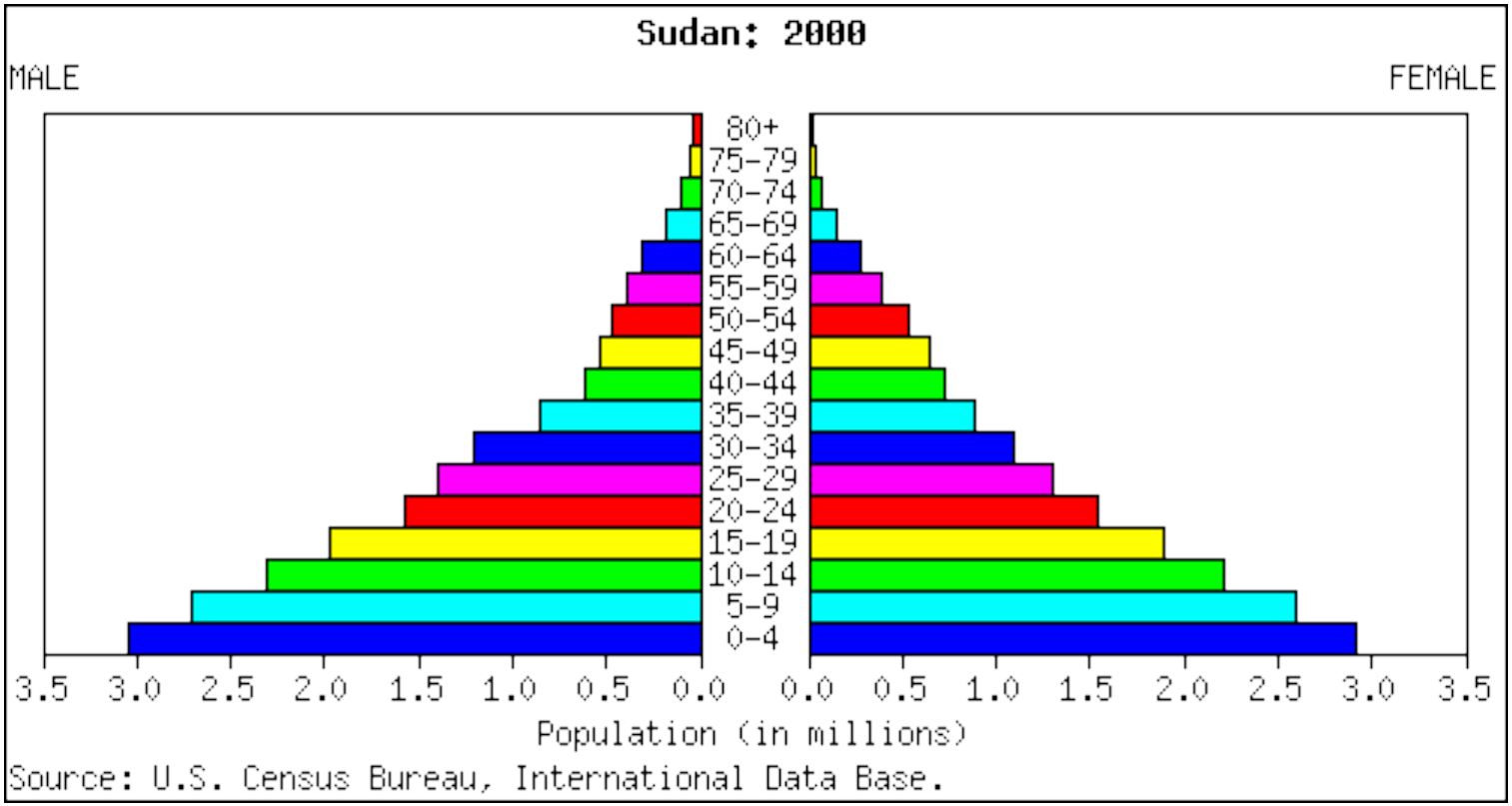
followed by GIS 1967

Bill C-227 Medical Care Act 1966 passed

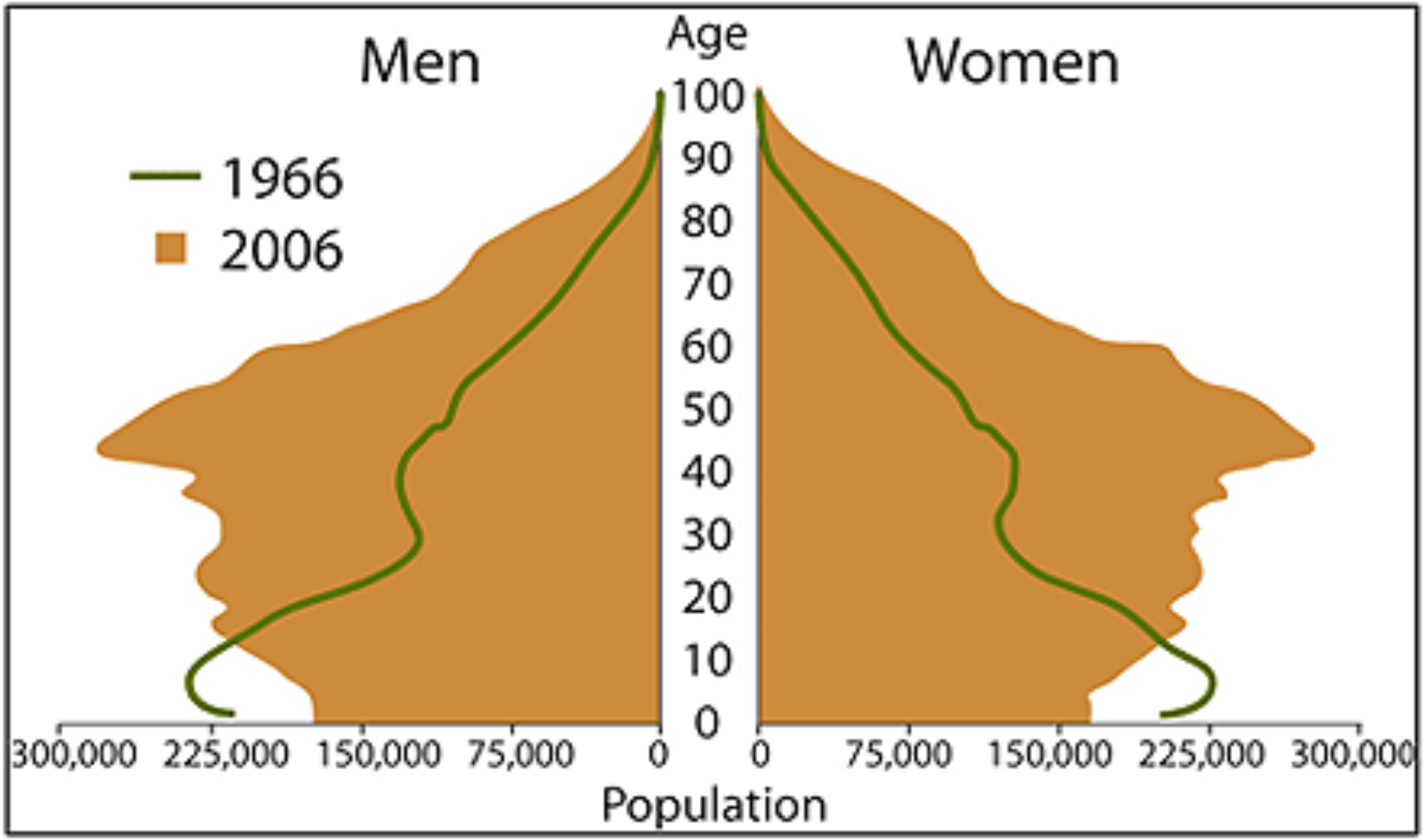
December 1966 – “Medicare” Implemented July 1 1968

and……

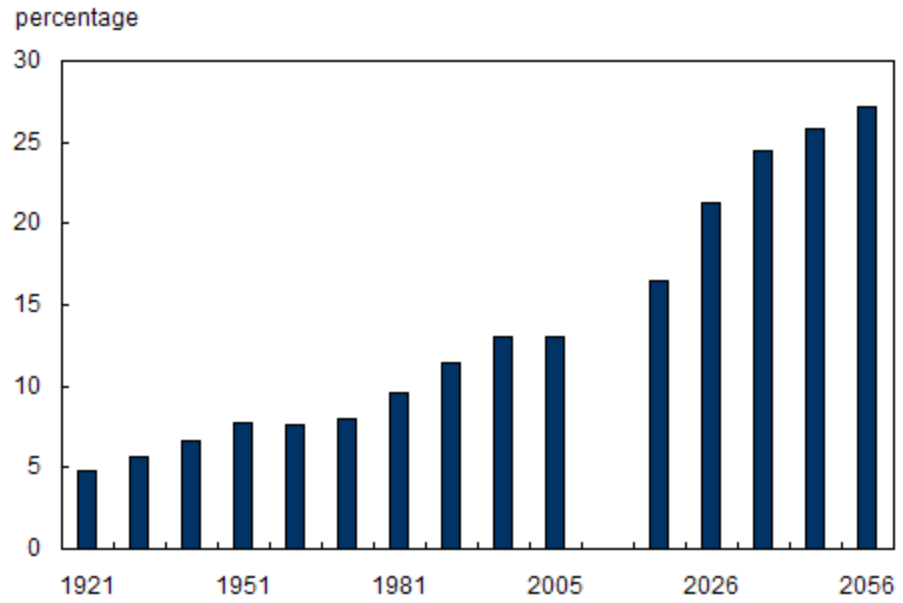
Half the Canadian population aged 25 and under


Sudan: 2000
MALE
FEMALE
80+
75-79
70-74
65-69
60-64
55-59
50-54
45-49
40-44
35-39
30-34
25-29
20-24
15-19
10-14
5-9
0-4
3.5 3.0 2.5 2.0 1.5 1.0 0.5 0.0 0.0 0.5 1.0 1.5 2.0 2.5 3.0 3.5
Population (in millions)
Source: U.S. Census Bureau, International Data Base.

Demographic Pyramid Canada 1966 and 2008



Population of Canada age 65 and older 1921-2056

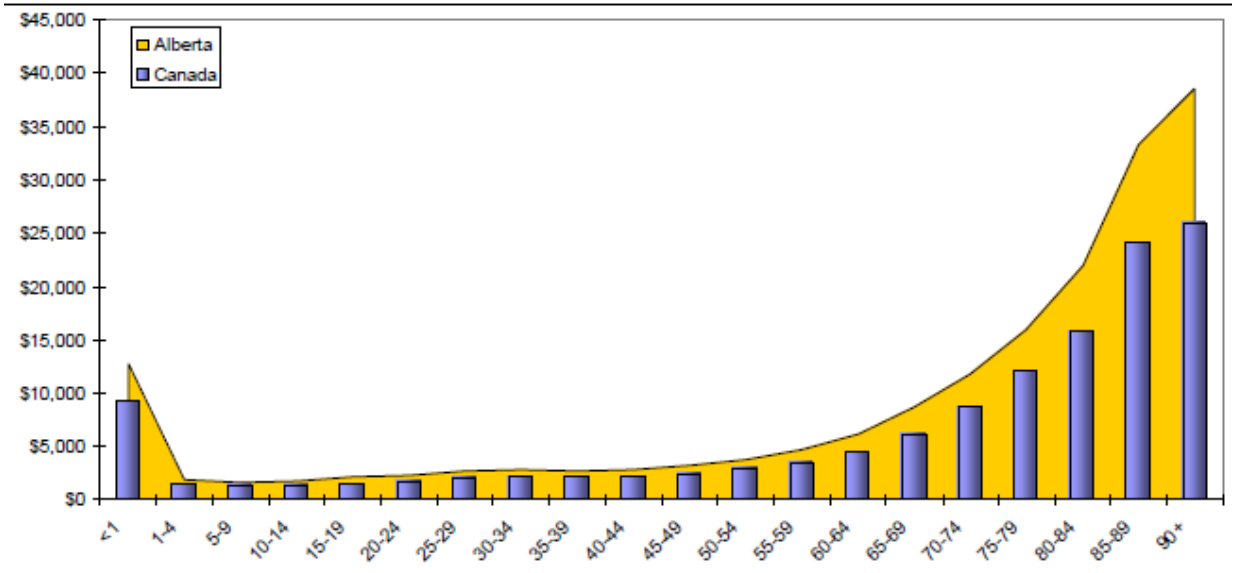


PRINCIPLES FOR MEDICAL CARE OF OLDER PERSONS BCMA 1999 and CMA 2000

3:*Particular needs of frail elderly persons*

- The "frail elderly" are those older persons with multiple interactive, acute or chronic health problems (physical and mental) compounded with functional and/or cognitive impairments and the need for supportive care.
- To achieve optimal health outcomes and quality of life and to minimize inappropriate use of resources, these elderly persons should have rapid access to an integrated range of specialized medical and other health care services

Figure 14: Provincial Government Hospital Expenditure by Age, Alberta vs. Canada, 2010



Source: CIHI

Taking a Biomedical approach to Frailty

We would discuss:

- Definition
- An Illustrative Case History
- Data on incidence and prevalence
- Distinction from & overlap with other conditions
- Recognition (Screening and/or case-finding)
- Prevention and Treatment
- Impact on service utilization
- Quality of Care; Morbidity and mortality

Approaches to defining "Frailty" 1/3

Frailty in Older Adults Evidence for a Phenotype.

Fried LPGerontol A Biol Sci Med Sci (2001) 56 (3): M146-M157.doi: 10.1093/gerona/56.3.M146

Frailty defined as a clinical syndrome in which three or more of the following criteria are present:

- unintentional weight loss (10 lbs in past year),
- self-reported exhaustion,
- weakness (grip strength),
- slow walking speed,
- low physical activity.

Approaches to defining "Frailty" 2/3

Guest editorial "Pinning down Frailty" Gillick M 2001 Gerontol A Biol Sci Med Sci (2001) 56 (3):M134M13doi:10.1093/gerona/56.3.M134

- At present, experienced geriatricians can readily diagnose frailty, but the general public and the general practitioner may be less sophisticated in its identification. Many elderly patients probably undergo aggressive and ultimately futile treatment near the end of life because either the physician or the patient fails to acknowledge that frailty has set in and that limitations of care are therefore appropriate.

Approaches to defining "Frailty" 3/3

A state of increased vulnerability characterized by diminished resilience to stressors resulting from impairments in multiple body systems arising from age-related physiological decline and often associated with, but separate from, multi-morbidity, cognitive impairment and disability.

Components of the aging process - from a focused biomedical perspective

- Biological aging - at present progressive, irreversible, deleterious and possible open to strategies to prevent or to delay onset.
- Diseases - potentially preventable or may be delayed, or modifiable by treatment or rehabilitation.
- Disuse and Deconditioning- Potentially preventable, treatable and reversible.

Contributions to the Aging Experience - a broader Gerontological perspective

- Personality, cultural and cohort variables
- Biological age-associated changes
- Genetic variables and early development
- Cognitive and psychological variables
- Co-morbidity and frailty
- Age-associated diseases
- Social roles, expectations & social support
- Environment, diet and exercise, lifestyle

Jeanne Louise Calment 1875-1997

Uncertainty in medicine

"Uncertainty has rightly been described as ' a fundamental feature of medicine-the physician's constant companion.' Much of medicine is, in fact, about making effective decisions in the face of uncertainty."

http://global.onclive.com/publications/Oncology-live/2009/Mar2009/ON_risk_of_risk

The Risk of Risk: Nace GS 2009

Uncertainty and Risk

- Risk refers to events for which the chance of occurrence is known in advance

- Uncertainty refers to events for which the chances are not known in advance

Risk : ……..

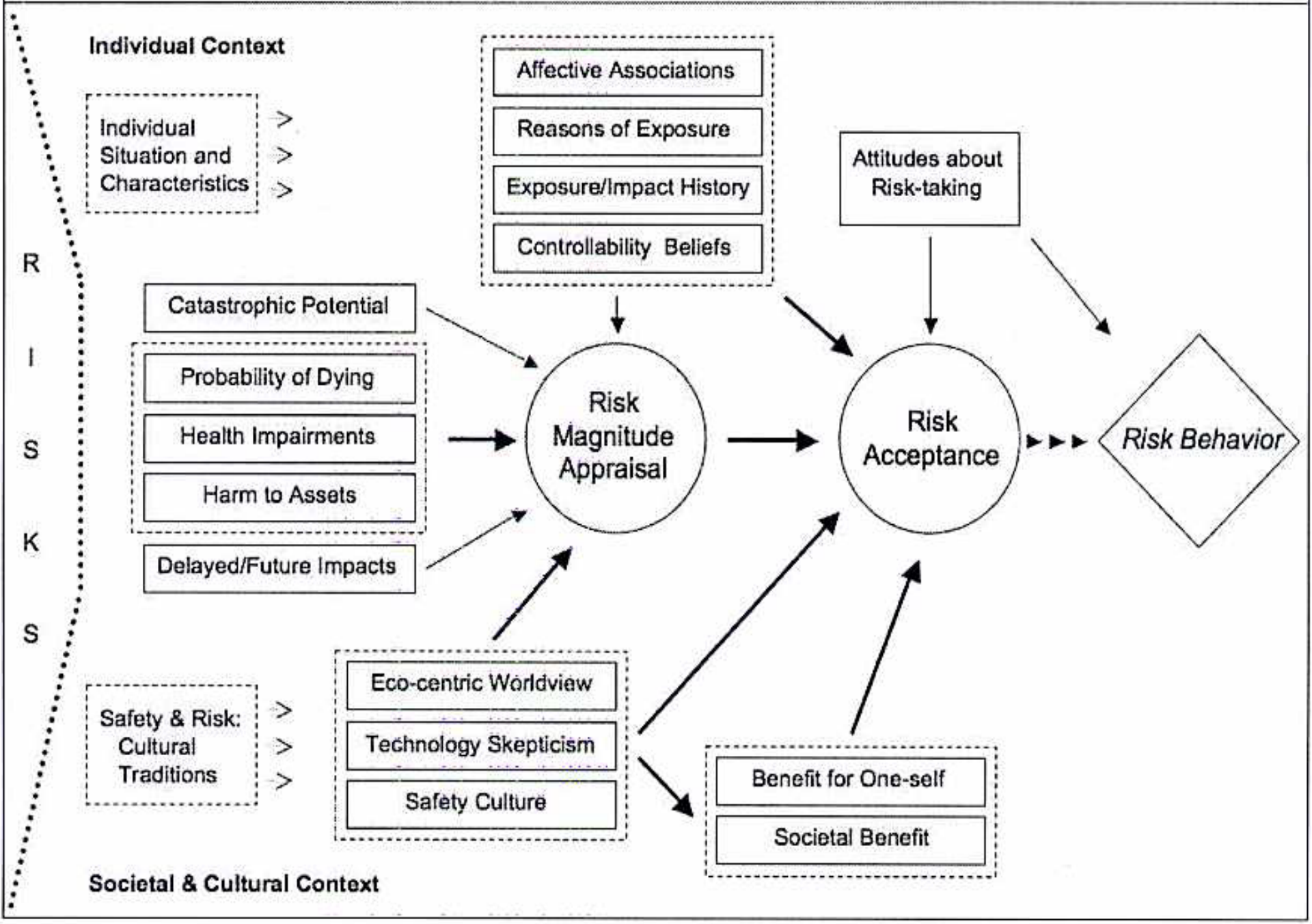
- Is universal
- Does not mean certainty
- Exists in a Social Context
- Is defined by others
- Can interact with other Risks

Modified from Spencer C, McKenzie P Risk and At Risk a Conceptual Framework 1995

- A **risk factor** is a variable associated with an increased risk of disease or condition

- Risk factors are correlational and not necessarily causal

SUBJECTIVE EVALUATION OF RISKS: STRUCTURAL MODEL



Frailty Journey
An Illustrative Case History

Vee” Born 1919
1980 age 60

- **1 Very fit – Robust, active, energetic, well motivated and fit; these people commonly exercise regularly and are in the most fit group for their age**
- **2 Well – Without active disease, but less fit than people in category 1**
- **3 Well, with treated comorbid disease – Disease symptoms are well controlled compared with those in category 4**
- **4 Apparently vulnerable – Although not frankly dependent, these people commonly complain of being “slowed up” or have disease symptoms**
- **5 Mildly frail – With limited dependence on others for instrumental activities of daily living**
- **6 Moderately frail – Help is needed with both instrumental and non-instrumental activities of daily living**
- **7 Severely frail – Completely dependent on others for the activities of daily living, or terminally ill**
- A global clinical measure of fitness and frailty in elderly people”, CMAJ 30-Aug-05;

2008 age almost 89

New medical Issues

HTN – treated

CAD with Angina

CHF-digoxin,diuretics,ACEI

Dyslipidemia -treated

AF on Warfarin

Osteoporosis

OA Knees Bil. TKA

Bil. Cataract surgery

CFS3 Well, with treated comorbid disease – Disease symptoms are well controlled compared with those in category 4

2008 (age 89) and 2013 (age 94)

New diagnoses and functional changes 2013 age 94

- Minor L hemispheric CVA with good recovery
- CKD
- Statin myopathy
- Dig toxicity
- Hyperuricemia with tophi
- Weight loss and diminished grip strength
- Instability- walks with walker
- Fatigue and limited exercise tolerance

CFS 4 Apparently vulnerable – Although not frankly dependent, these people commonly complain of being "slowed up" or have disease symptoms

Clinical Frailty Scale*

1 **Very Fit** – People who are robust, active, energetic and motivated. These people commonly exercise regularly. They are among the fittest for their age.

2 **Well** – People who have **no active disease symptoms** but are less fit than category 1. Often, they exercise or are very **active occasionally**, e.g. seasonally.

3 **Managing Well** – People whose **medical problems are well controlled,** but are **not regularly active** beyond routine walking.

4 **Vulnerable** – While **not dependent** on others for daily help, often **symptoms limit activities.** A common complaint is being "slowed up", and/or being tired during the day.

5 **Mildly Frail** – These people often have **more evident slowing,** and need help in **high order IADLs** (finances, transportation, heavy housework, medications). Typically, mild frailty progressively impairs shopping and walking outside alone, meal preparation and housework.

6 **Moderately Frail** – People need help with **all outside activities** and with **keeping house**. Inside, they often have problems with stairs and need **help with bathing** and might need minimal assistance (cuing, standby) with dressing.

7 **Severely Frail** – **Completely dependent for personal care**, from whatever cause (physical or cognitive). Even so, they seem stable and not at high risk of dying (within ~ 6 months).

8 **Very Severely Frail** – Completely dependent, approaching the end of life. Typically, they could not recover even from a minor illness.

9. Terminally Ill - Approaching the end of life. This category applies to people with **a life expectancy <6 months**, who are **not otherwise evidently frail.**

Scoring frailty in people with dementia

The degree of frailty corresponds to the degree of dementia. Common symptoms in mild dementia include forgetting the details of a recent event, though still remembering the event itself, repeating the same question/story and social withdrawal.

In moderate dementia, recent memory is very impaired, even though they seemingly can remember their past life events well. They can do personal care with prompting.

In severe dementia, they cannot do personal care without help.

* 1. Canadian Study on Health & Aging, Revised 2008.
2. K. Rockwood et al. A global clinical measure of fitness and frailty in elderly people. CMAJ 2005;173:489-495.

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Inspiring Minds

2015

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ied cause of death takes account of information
rom post-mortem.
on from post-mortem may be available later.
em not being held.
orted this death to the Coroner for further action.

Please ring appropriate digit(s) and letter

a Seen after death by me.
b Seen after death by another medical practitioner but not by me.
c Not seen after death by a medical practitioner.

CAUSE OF DEATH

The condition thought to be the 'Underlying Cause of Death' should appear in the lowest completed line of Part I.

e or condition directly to death† Congestive Cardiac Failure

isease or condition, if any, to I(a) Atrial Fibrillation

isease or condition, if any, to I(b) Ischaemic Heart Disease

gnificant conditions IBUTING TO THE DEATH but ed to the disease or condition it. Acute kidney Injury, Chronic obstructive Pulmonary Disease, Frailty of old age.

ht have been due to or contributed to by the employment followed at some time by the deceased.

Pleas whe

ode of dying, such as heart failure, asphyxia, asthenia, etc: it means the disease, injury, or complication which caused death.

s in medical ove named

Signature

Qualifications as registered by General Medical Council

Taking a Biomedical approach to Frailty

We would discuss:

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- Impact on service utilization
- Quality of Care; Morbidity and mortality
- Evidence-informed interventions

Frailty prevalence depends on the model of frailty used.

- A recent international systematic review of 31 studies of frailty in people living in the community aged 65 years or more found prevalence rates between 4 and 17% (mean 9.9%) of physical frailty using the phenotypic model. This uses 5 possible physical (phenotypic) markers – weight loss, exhaustion, weakness, slowness, and reduced physical activity. Prevalence was higher when using the broader deficit model (which includes psychosocial frailty), with rates between 4.2 and 59.1%.
- Women were almost twice as likely as men to be frail.
- The prevalence of frailty is markedly increased in persons older than 80

Collard RM, Boter H, Schoevers RA et al. (2012) Prevalence of frailty in community dwelling older persons: A systematic review. Journal of the American Geriatric Society 60:1487–1492

Proposed measures of the components of frailty: Campbell AJ Age *and Ageing* 1997; 26: 315-318

Frailty can be diagnosed clinically by measuring four key capacities required for successful interaction with the environment:

- musculoskeletal function,
- aerobic capacity,
- cognitive and integrative neurological function.
- nutritional state.

Prevalence of Frailty by Fried's Definition US Community Sample

- The overall prevalence of frailty 6.9%;
- Four-year incidence was 7.2%.
- Frailty associated with
- African American,
- lower education and income,
- poorer health,
- higher rates of comorbid chronic diseases and disability.

NB, overlap but not concordance, of frailty, comorbidity, and disability

http://icd10coded.com/search/?q=Frailty%2F+frailty+of+old+age

Search ICD 10 Codes by diagnosis or condition

Frailty/ frailty of old age | Search

Search by terms such as
"Hypertension" — "Diabetes" — "Anemia" — "Depression" — "Pneumonia" — "Neck Pain"

Search results for "Frailty/ frailty of old age"

No records found using the specified search criteria.

ICD10 Codes Equivalent to “Frailty”

- N39 Disorder of urinary tract, unspecified
- R54 Senility (Age-related physical disability)
- J 22 Unspecified acute lower respiratory infection
- R55 Syncope and Collapse
- R69 Unknown and unspecified causes of mortality
- R41 Other symptoms and signs involving cognitive function and awareness

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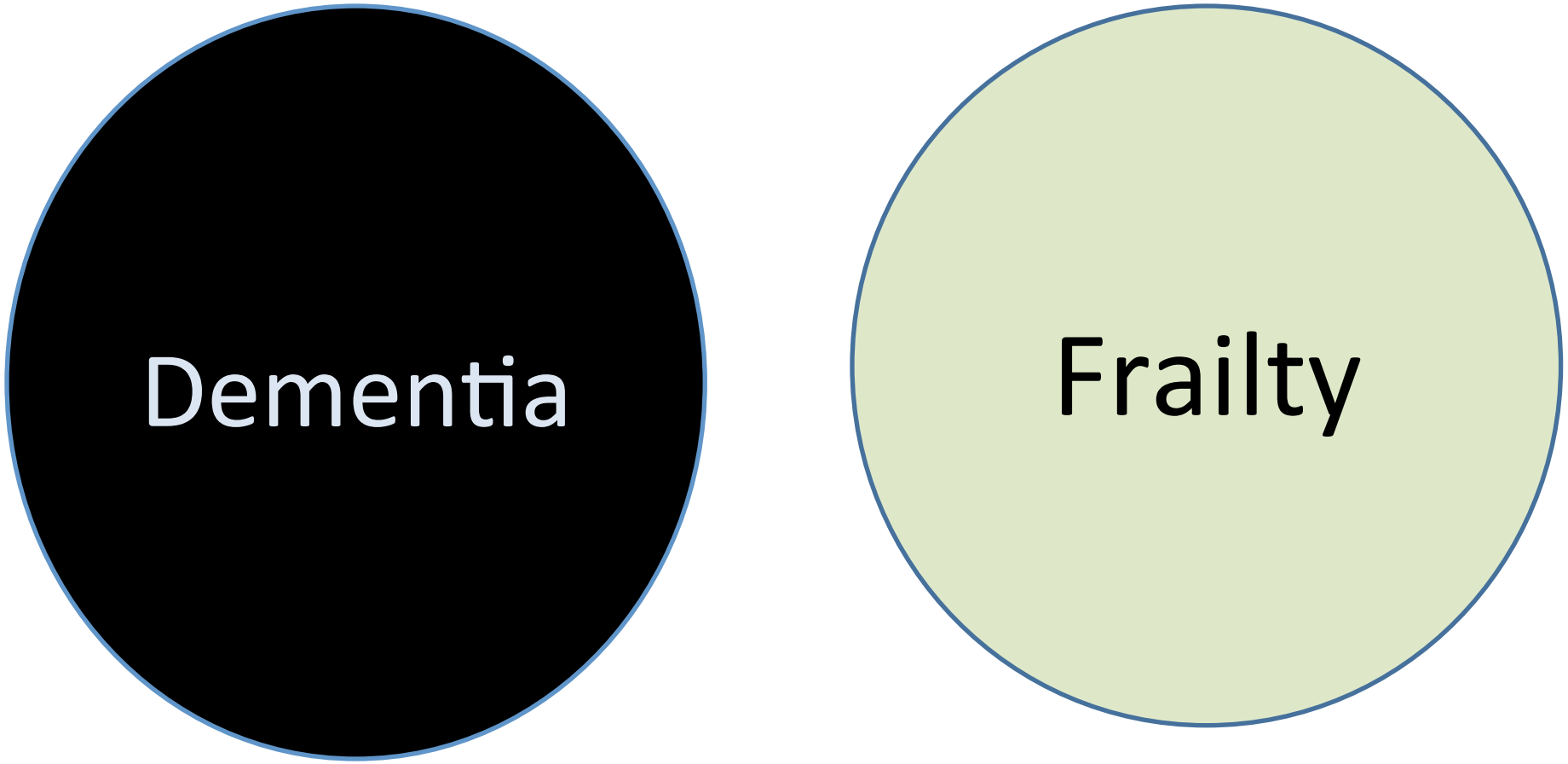
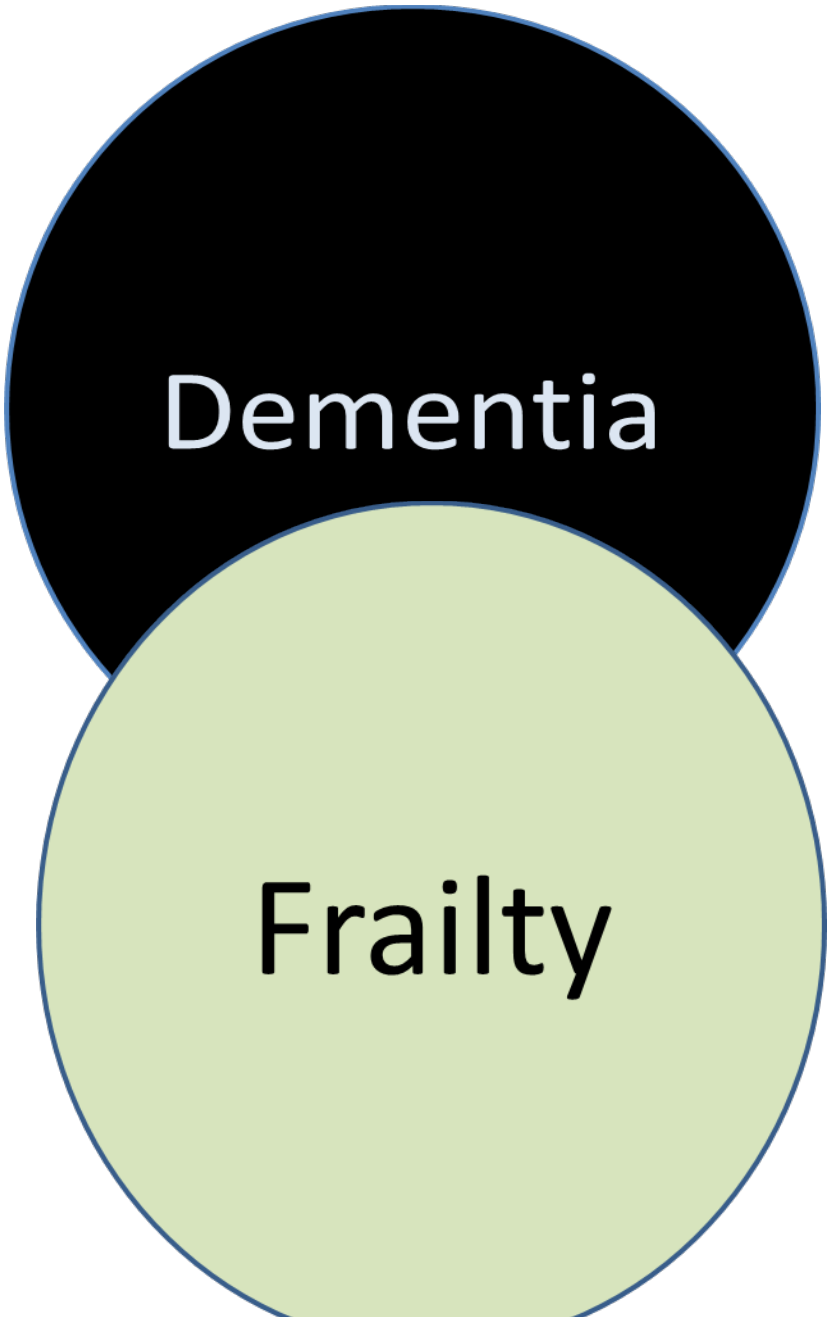
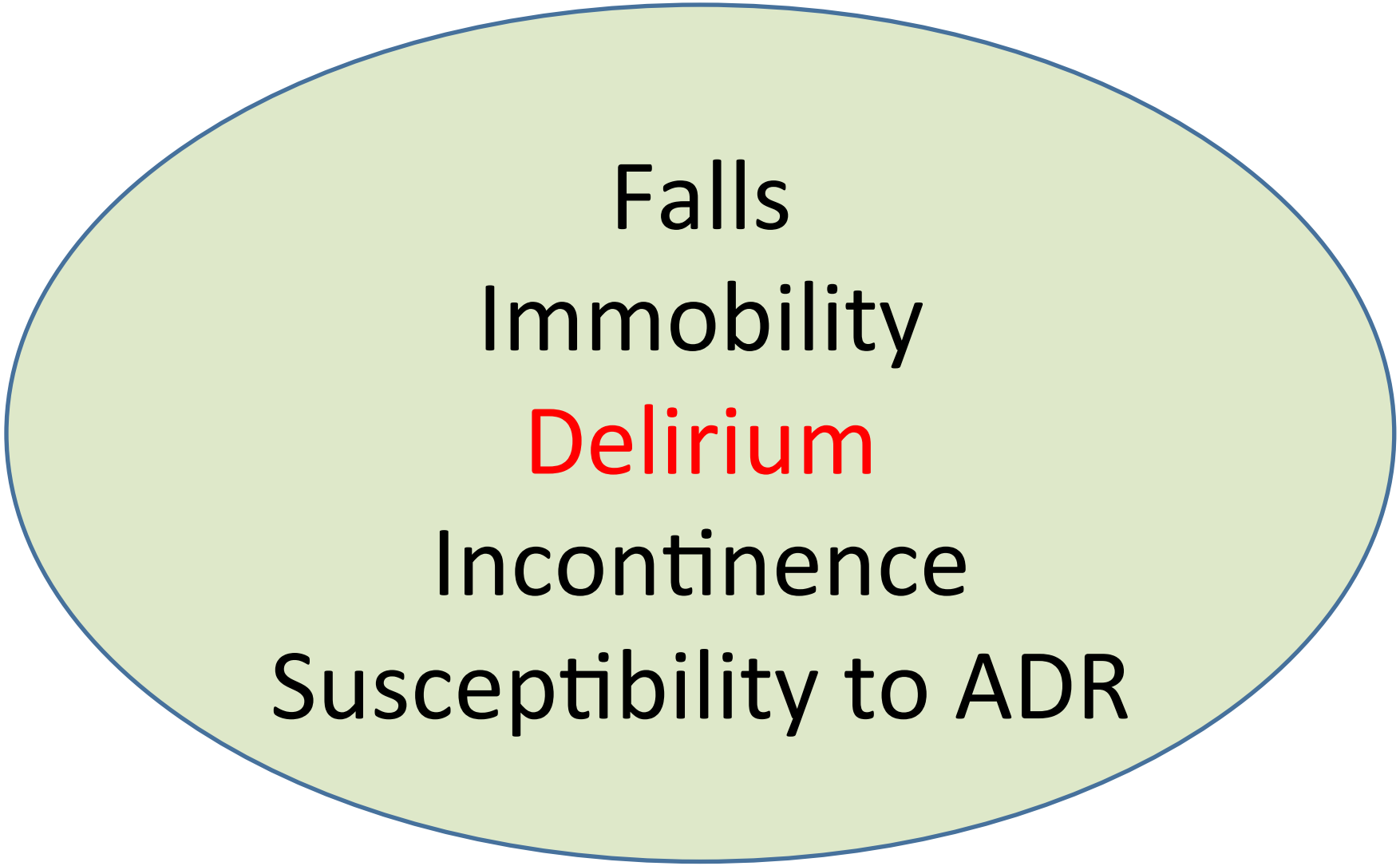

Dementia
Frailty


Dementia
Frailty

Frailty Syndromes

http://www.bgs.org.uk/index.php/recognise-frailty-syndrome

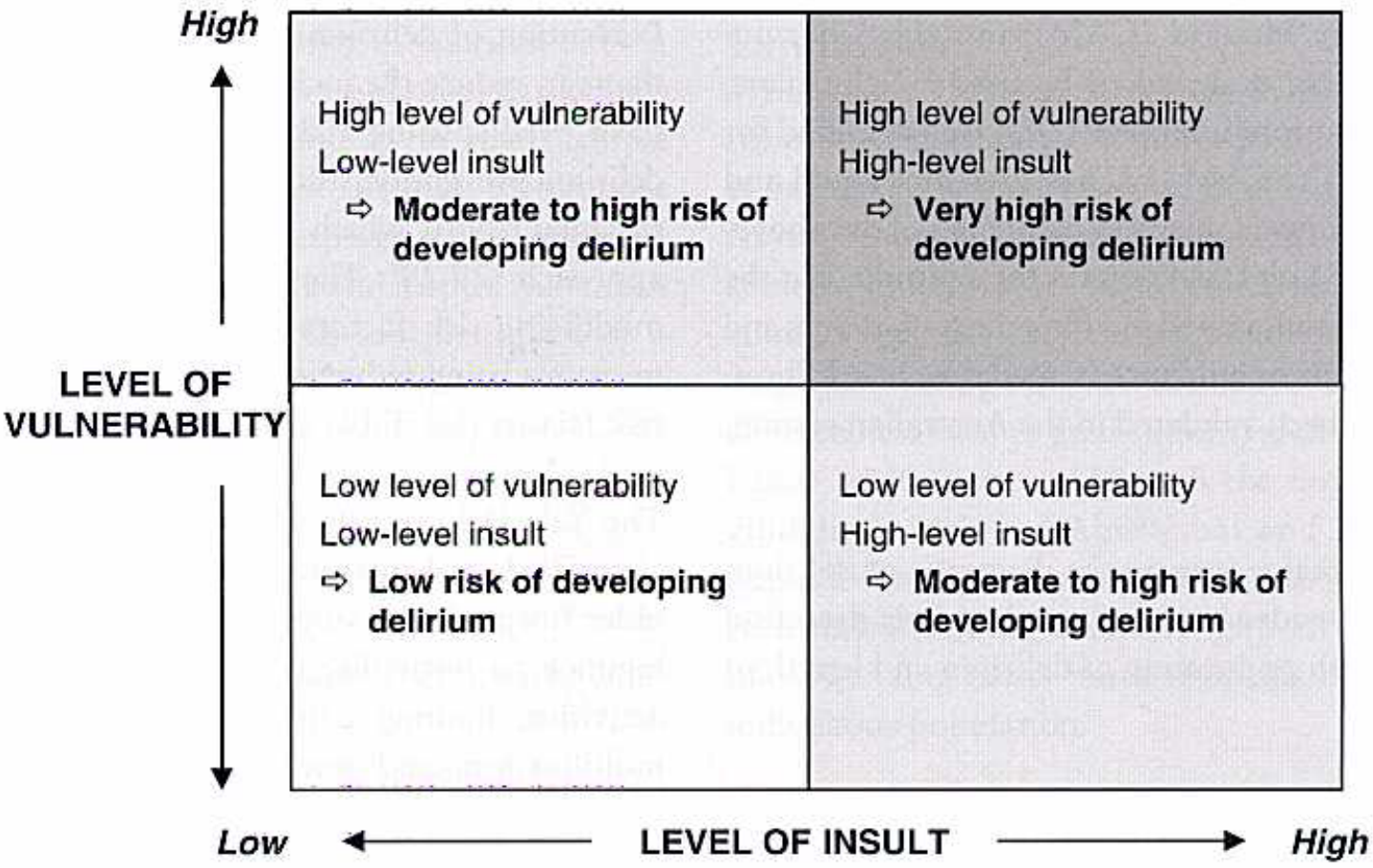


Who is at risk for delirium?

Anyone can develop delirium, but the risk increases in older people :

- of advanced age
- in pain or receiving narcotics
- taking multiple medicines particularly anticholinergic.
- with cognitive impairment
- with Frailty
- who are febrile and/or dehydrated.
- with an infection.
- following surgery, especially hip and cardiovascular surgery.
- nearing the end of life.
- With visual and/or hearing impairment
- with constipation or urinary retention.

Figure 1: The interrelationship between level of vulnerability and level of precipitating insult.



and yet, when we look for Delirium

10-40% of older patients in acute care develop new episodes of delirium[4]

41-56% of patients 60 years and over develop delirium after hip fracture surgery[5,6]

15% of patients 60 years and over develop delirium after elective hip surgery[5]

32% of patients 65 years and over develop delirium after coronary artery bypass surgery[7]

31% develop delirium while in the intensive care unit[2]

83% develop delirium when mechanically ventilated[8]

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Frailty: Recognition and Measurement

- Judgment-based (CSHA Clinical Frailty Scale)
- Physical performance measure-based

  (sit to stand, gait speed grip strength)
- Physical frailty (CV Health Study criteria)
- Multi-dimensional frailty (Edmonton Frail Scale)
- Frailty index

  Accumulation of deficits . i.e. total number of deficits present divided by maximum potential number of deficits

Appendix 1: List of variables used by the Canadian Study of Health and Aging to construct the 70-item CSHA Frailty Index

- Changes in everyday activities
- Head and neck problems
- Poor muscle tone in neck
- Bradykinesia, facial
- Problems getting dressed
- Problems with bathing
- Problems carrying out personal grooming
- Urinary incontinence
- Toileting problems
- Bulk difficulties
- Rectal problems
- Gastrointestinal problems
- Problems cooking
- Sucking problems
- Problems going out alone
- Impaired mobility
- Musculoskeletal problems
- Bradykinesia of the limbs
- Poor muscle tone in limbs
- Poor limb coordination
- Poor coordination, trunk
- Poor standing posture
- Irregular gait pattern
- Falls
- Mood problems
- Feeling sad, blue, depressed
- History of depressed mood
- Tiredness all the time
- Depression (clinical impression)
- Sleep changes
- Restlessness
- Memory changes
- Short-term memory impairment
- Long-term memory impairment
- Changes in general mental functioning
- Onset of cognitive symptoms
- Clouding or delirium
- Paranoid features
- History relevant to cognitive impairment or loss
- Family history relevant to cognitive impairment or loss
- Impaired vibration
- Tremor at rest
- Postural tremor
- Intention tremor
- History of Parkinson's disease
- Family history of degenerative disease
- Seizures, partial complex
- Seizures, generalized
- Syncope or blackouts
- Headache
- Cerebrovascular problems
- History of stroke
- History of diabetes mellitus
- Arterial hypertension
- Peripheral pulses
- Cardiac problems
- Myocardial infarction
- Arrhythmia
- Congestive heart failure
- Lung problems
- Respiratory problems
- History of thyroid disease
- Thyroid problems
- Skin problems
- Malignant disease
- Breast problems
- Abdominal problems
- Presence of snout reflex
- Presence of the palmomental reflex
- Other medical history

Should We Screen for Frailty?

- Wilson and Jungner criteria
  - "… in theory, screening is an admirable method of combating disease … [but] in practice, there are snags" - Wilson JMG, Jungner G. *Principles and practice of screening for disease*. Geneva: WHO; 1968
- Select criteria
  - Condition is an important health problem
  - Accepted treatment
    - Avoiding harm by labelling
  - Suitable test
  - Natural history understood

Screening for Frailty in Primary Care 1/2

Three studies investigated seven simple methods for identifying frailty; these were:

- **PRISMA 7 Questionnaire** - which is a seven item questionnaire to identify disability that has been used in earlier frailty studies and is also suitable for postal completion. A score of > 3 is considered to identify frailty.
- **Walking speed (gait speed)** - Gait speed is usually measured in m/s and has been recorded over distances ranging from 2.4m to 6m in research studies. In this study, gait speed was recorded over a 4m distance.
- **Timed up and go test** - The TUGT measures, in seconds, the time taken to stand up from a standard chair, walk a distance of 3 metres, turn, walk back to the chair and sit down.
- **Self-Reported Health** - which was assessed, in the study examined, with the question 'How would you rate your health on a scale of 0-10'. A cut-off of < 6 was used to identify frailty.
- **GP assessment** - whereby a GP assessed participants as frail or not frail on the basis of a clinical assessment.
- **Multiple medications (polypharmacy)** - where frailty is deemed present if the person takes five or more medications.
- **The Groningen Frailty Indicator questionnaire** - which is a 15 item frailty questionnaire that is suitable for postal completion. A score of > 4 indicates the possible presence of moderate-severe frailty.
- **The identification of frail older adults in primary care: comparing the accuracy of five simple instruments**
  Emiel O. Hoogendijk1,2⇓, Henriëtte E. van der Horst1,2, Dorly J. H. Deeg2,3, Dinnus H. M. Frijters1,2, Bernard A. H. Prins4, Aaltje P. D. Jansen1,2, Giel Nijpels1,2 and Hein P. J. van Hout1,2
  Age Ageing (2012) doi: 10.1093/ageing/afs163 First published online: October 28, 2012

Frailty Screening in Primary Care 2/2

- Prisma 7
- Gait speed > 5 secs to walk 4 metres
  Gait speed: taking more than 5 seconds to cover 4 metres
- Timed up-and-go test (TUGT): a cut off score of 10 seconds to get up from a chair, walk 3 meters, turn round and sit down.

Recognizing frailty-BGS recommendations

http://www.bgs.org.uk/index.php/fit-for-frailty

- Older people should be assessed for the possible presence of frailty during all encounters with health and social care professionals. Slow gait speed, the PRISMA questionnaire, the timed-up-and-go test are recommended as reasonable assessments. The Edmonton Frail Scale is recommended in elective surgical settings.
- Provide training in frailty recognition to all health and social care staff who are likely to encounter older people.
- Do not offer routine population screening for frailty.

Screening for Frailty

PRISMA Program of Research to Integrate Services for the Maintenance of Autonomy :
Hebert R et al 2003 Can Fam Physician 2003 49:992-007

- **Prisma 7 Questions (>3 'positive')**

1Are you older than 85 years?

2Are you Male?

3Do you have any health problems that require you to limit your activities?

4Do you need someone to help you on a regular basis?

5In general do you have any health problems that require you to stay at home

6In case of need can you count on someone close to you?

7Do you regularly use a cane, walker or wheelchair to get about?

Prisma 7 and PRISME

Le Programme de Recherche sur l'Intégration des Services pour le Maintien de l'Autonomie

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7 Do you regularly use a cane, walker or wheelchair to get about?

- Pain
- Poor Nutrition
- Retention
- Restraints
- Infection/Illness(new)
- Sleep
- Skin
- Sensory
- Mental Status
- Medications
- Metabolic
- Environment

Lothian NHS Frailty Screening in ACH

Frailty screening tool

Name:
Date of birth:
CHI number:

Date: / /
Zero time: :

Practitioner name: _____ Practitioner signature: _____

Designation: _____

Step 1 **Would this person benefit from Comprehensive Geriatric Assessment?**
Aged 75 and over/age 65+ from nursing or residential care or admitted from community hospital

		YES	NO
F	Functional impairment in context of significant multiple conditions (new or pre-existing)		
R	Resident in a care home		
A	Acute confusion (Think Delirium), for example the 4AT screening tool - is there a diagnosis of dementia or a history of chronic confusion?		
I	Immobility or falls in last 3 months		
L	List of six or more medicines (polypharmacy)		

Are any of the above criteria met?
If **YES** to any of the above, move to Step 2

Step 2 **For those potentially being referred for Comprehensive Geriatric Assessment Would this person be better managed by another specialty team at present?**
Indicator for care by another acute specialty regardless of age

YES NO

Edmonton Frail Scale

Frail Scale:				Score: ___/17
	Item	0 point	1 point	2 points
	Please imagine that this pre-drawn circle is a clock. I would like you to place the numbers in the correct positions then place the hands to indicate a time of 'ten after eleven'	No errors	Minor spacing errors	Other errors
status	In the past year, how many times have you been admitted to a hospital?	0	1–2	≥2
	In general, how would you describe your health?	'Excellent', 'Very good', 'Good'	'Fair'	'Poor'
pendence	With how many of the following activities do you require help? (meal preparation, shopping, transportation, telephone, housekeeping, laundry, managing money, taking medications)	0–1	2–4	5–8
	When you need help, can you count on someone who is willing and able to meet your needs?	Always	Sometimes	Never
	Do you use five or more different prescription medications on a regular basis?	No	Yes	
	At times, do you forget to take your prescription medications?	No	Yes	
	Have you recently lost weight such that your clothing has become looser?	No	Yes	
	Do you often feel sad or depressed?	No	Yes	
	Do you have a problem with losing control of urine when you don't want to?	No	Yes	
ormance	I would like you to sit in this chair with your back and arms resting. Then, when I say 'GO', please stand up and walk at a safe and comfortable pace to the mark on the floor	0–10 s	11–20 s	One of >20 s patient unwilling, or requires

Not frail (0–5)
Vulnerable (6–7)
Mildly frail (8–9),
Moderately frail (10–11)
Severely frail (12+)

EFS REFS : What's the Difference? 17 vs 18

Australian Journal on Ageing
Assessment of Frailty in Older People in Acute Care
DOI: 10.1111/j.1741-6612.2009.00367.

- Reported Edmonton Frail Scale (REFS) uses the same domains as the Edmonton Frail Scale but substitutes the observed 'get up and go' with a report of physical function before the current illness.
- Reports are made by the patient if cognitively intact, or by a collateral source if the patient is cognitively impaired.

Current Status

- Multiple studies across a range of settings have shown that frailty (variously defined) is associated with adverse outcomes
  - Better than other risk factors?
- Patients with frailty, especially at a later or more severe stage are less likely to benefit from more intrusive forms of therapy and can be reasonably advised to consider a less aggressive course of action
  - Should trigger person-centred discussions, but caution should be exercised in using frailty as the reason to withhold potentially beneficial forms of therapy (choice, reversibility, limited accuracy, still best option)

Frailty: Management Options

- In-hospital care that would benefit all;
  - Person-centred care, early mobilization, medications stewardship, screening for common complications (e.g., delirium), minimizing challenges to older patients that might precipitate problems or impede recovery (e.g., Hospital Elder Life Program, Elder/ Senior Friendly strategies), pro-active discharge planning
- In-hospital services limited by availability & cost
  - Comprehensive geriatric assessment (referred to as the "gold standard for the management of frailty in older people"), tailored interventions provided in a defined physical environment (e.g., Acute Care for Elders units)
- Health care system (upstream & downstream)
  - Appropriately avoiding admissions or decreasing exposure to the hazards of hospitalization by earlier discharges would complement in-hospital approaches

http://www.bgs.org.uk/campaigns/fff/fff_short.pdf

- ***Frailty syndromes***
- The presence of one or more of these 5 syndromes should raise suspicions that the individual has frailty and that the apparently simple presentation may mask more serious underlying disease:
- Falls (e.g. 'collapse', 'legs gave way', 'found lying on floor)'
- Immobility (e.g. sudden change in mobility, 'gone off legs' 'stuck on toilet')
- Delirium (e.g. acute confusion, worsening of pre-existing confusion/ short term memory loss)
- Incontinence (e.g. new onset or worsening of urinary or faecal incontinence)
- Susceptibility to side effects of medication (e.g. confusion with codeine, hypotension with antidepressants).

Remaining questions about the "Frailty syndrome"

2006 Second International Working Meeting on Frailty and Aging.

- What is the distinction, if any, between frailty and aging?
- What is its relationship with chronic disease?
- Is frailty a syndrome or a series of age-related impairments that predict adverse outcomes?
- What are the critical domains in its operational definition?
- Is frailty a useful concept?

Taking a Biomedical approach to Frailty

We would discuss:

- Definition
- An Illustrative Case History
- Data on incidence and prevalence
- Distinction from & overlap with other conditions
- Recognition (Screening and/or case-finding)
- Prevention and Treatment
- Impact on service utilization
- Quality of Care; Morbidity and mortality

Dementia, disability and frailty in later life – mid-life approaches to delay or prevent onset

NICE guidelines [NG16] Published date: October 2015

http://www.nice.org.uk/guidance/NG16/chapter/1-Recommendations

- **Encouraging healthy behaviours**
- **Integrating dementia risk reduction prevention policies**
- **Raising awareness of risk of dementia, disability and frailty**
- **Producing information on reducing the risks of dementia, disability and frailty**
- **Preventing tobacco use**
- **Improving the environment to promote physical activity**
- **Reducing alcohol related risk**
- **Supporting people to eat healthily**
- **Delivering services to promote behaviour change**
- **Providing advice on reducing the risks of dementia, disability and frailty at every appropriate opportunity**
- **Providing physical activity opportunities**
- **Provide training**
- **Leading by example in the public sector**
- **Providing support in the workplace**

Rationale for a common, evidence–informed, and individualized, approach to Frailty

- Individuals who are frail, or at risk for frailty, have limited capacity to respond to stressors. Their risk of death, functional loss & service utilization increase.
- Following identification of frail older adults, and those at risk for frailty, thoughtful care-planning & implementing interventions to reduce and manage the risks associated with frailty, further disability and service utilization can be minimized and quality of life improved.

Collaborative Goal Setting
Concerns and preferences for care

What are the:

- patient's or family/caregiver's concerns?
- patient and family expectations?
- physician's concerns?
- patient's priorities for their care -considering both the physician's concerns and their own concerns?
- patient and/or family/caregiver hope to achieve from medical treatment and/or "Care"?

Care Planning for Frailty

1. Medication Review
2. Advance care planning
3. Goals associated with significant health and safety risks (e.g. falls, living alone)
4. Plans to manage significant co-morbidities in relation to patient goals
5. Expected outcomes
6. Names and contact information of other providers involved in the care of the patient
7. Plans for follow-up

PATH
http://pathclinic.ca/resources/

- What is PATH?
- PATH is a process that helps older people and their families understand their health status and guides them through the process of making health care decisions that protect their best interests and quality of life.
-
- What services does PATH offer?
- 1. Clinical consult at the PATH Clinic in Halifax or in South Shore NS (more information here).
- 2. Training for members of health care teams who would like to build efficiency and increase capacity for improved assessment and care planning (more information here).
- Guidelines
- In Collaboration with other groups, such as the Drug Evaluation Alliance of Nova Scotia (DEANS), the Diabetes Care program of Nova Scotia, and the Dalhousie University Academic Detailing Service, PATH develops frailty-relevant, evidence-informed treatment recommendations for common conditions that occur in frailty
- Treating Hyperlipidemia in Severe and Very Severe Frailty – click here to view
- Treating Hypertension in Frailty – click here to view
- Diabetes Guidelines for the Frail Elderly – click here to view
- Diabetes Guidelines for Elderly Residents in Long Term Care – click here to view
- Resources
- FACT – Frailty Assessment for Care planning Tool (FACT)
- The FACT is an adaptation of the Clinical Frailty Scale that can be used in busy “non-geriatrics” clinic settings.
- •View the FACT
- •Instructions for using the FACT

Frailty Assessment for Care-planning Tool (FACT)

FINAL SCORING SHEET

path clinic
PALLIATIVE AND THERAPEUTIC HARMONIZATION

	Mobility is at baseline? ○ YES ○ NO			Cognition is at baseline? ○ YES ○ NO
	Baseline Mobility	**Social**	**Function**	**Cognition**
1. Thriving	○ Fit, exercises regularly (among fittest for age)	○ In charge of organizing social events	○ Still working at job or high level hobby	○ **Thriving**: impresses others with memory and thinking
2+3. Normal Aging	○ Active/exercises occasionally	○ Socializes weekly & would have a caregiver if needed	○ Subjective impairment (i.e. Does everything on own but finds things more difficult)	○ **Normal aging**: patient worried about memory but family (caregiver) is not ○ **Normal aging**: patient worried, collateral not available
4. Vulnerable	○ Starting to slow down and often tired during the day	○ Socializes less than weekly OR might not have a caregiver if needed	○ Not dependent on others but symptoms often limit activities	○ **Vulnerable**: minor deficits on testing **(cognitive impairment, not dementia)**
5. Mild	○ Walking slower and regularly uses (or should use) a cane or walker	○ Socializes rarely	○ Needs help with some instrumental activities of daily living (IADLS) (e.g. housework, banking or medications)	○ **Mild stage dementia:** Vague/incorrect recall of current events, can recall name of US president
6. Moderate	○ Needs help of another person when using stairs, walking on uneven ground, or getting in/out of bath OR Has fallen more than once in the past 6 months, excluding slip on ice	○ Mostly house-bound	○ Needs assistance or dependent for IADLS and cueing with basic activities of daily living (BADLS) (e.g. help choosing what to wear or requires reminders to bathe)	○ **Moderate stage dementia:** Incorrect recall of US President, can recall name of children/spouse ○ No collateral present
7. Severe	○ Always needs someone's help or supervision when walking OR Unable to propel self in manual wheelchair	○ House-bound and isolated OR caregiver stress/or no available caregiver to meet care needs	○ Needs hands on help with BADLS (bathing, toileting, dressing)	○ **Severe stage dementia:** Unable to name children, spouse or siblings
8. Very Severe	○ Bed bound, unable to participate in transfers	○ Unable to participate in any social exchange, even when visited	○ Dependent for all aspects of daily life	○ **Very severe stage dementia:** Limited language skills with few words verbalized
9. Terminal	○ Terminally ill with a life expectancy ≤ 6 months regardless of function, cognition or mobility status			

Compatible with: Rockwood K. CMAJ 2005;173:489-95; Borson S. Int J Geriatr Psychiatry 2000;Nov 15(11):1021-27; and Reisberg B. Psychopharmacol Bull 1988;24:629-36.

Signature _____ Date _____

Early warning signs of frailty occurring alone or in combination

- **weight change**
- **reduced physical activity levels and endurance**
- **impaired balance and mobility**
- **falling & increased number and frequency of falls**
- **declining function**
- **polypharmacy and psychoactive med. use**
- **impaired vision/hearing**
- **increased alcohol use**
- **driving competency issues**
- **difficulty maintaining continence**
- **changed sleep pattern**
- **frequent/increased pain**
- **inappropriate behaviour**
- **social isolation**
- **living circumstances**
- **family/caregiver support**
- **caregiver stress**
- **irrational fears/concerns**

Transitions in Care are where it can all go wrong

- Insufficient time for recovery
- Precipitate judgments
- Pressure for a decision, any decision
- Discontinuity of RX information
- Delayed / incomplete information transfer
- Failure to plan for a durable discharge

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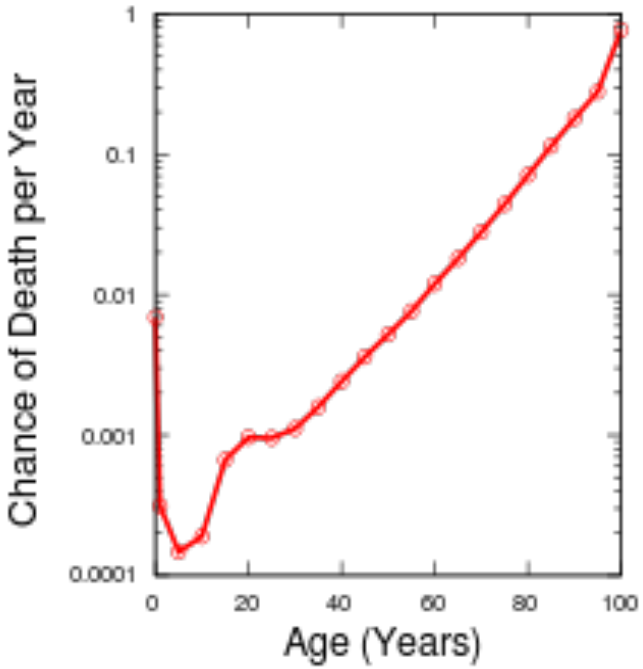
Category	Measure
Patient experience	Support to self-manage long-term conditions (LTCs)
Patient experience	GP listening with care and concern
Harm reduction	Pressure ulcer incidence
Harm reduction	Harm from medication errors
Quality of life	Discharge rates to usual place of residence
Quality of life	Proportion of patients with fragility fractures recovering to their previous levels of mobility/walking ability at 120 days
Systems supporting older people	Emergency readmissions: 30 and 90 day
Systems supporting older people	Length of stay: key LTCs, without dementia
SUS	Cost of emergency readmissions in over 65s
SUS	Cost of excess bed days

The table above gives some suggested measures which are already recorded within the health system. There is a need to develop a balanced scorecard of outcome measures relating to frail older people and their care. In order to evaluate the impact of an integrated, 'end-to-end' pathway, this should include those from the NHS Outcomes Framework, the Social Care Outcomes Framework and the Public Health Outcomes Framework. Future work on developing a specific set of quality measures with financial modelling is planned for later in 2014.

Benjamin Gompertz 1779-1865



Last verses of *L'Envoi " Once more my sheaf of songs I tie"*

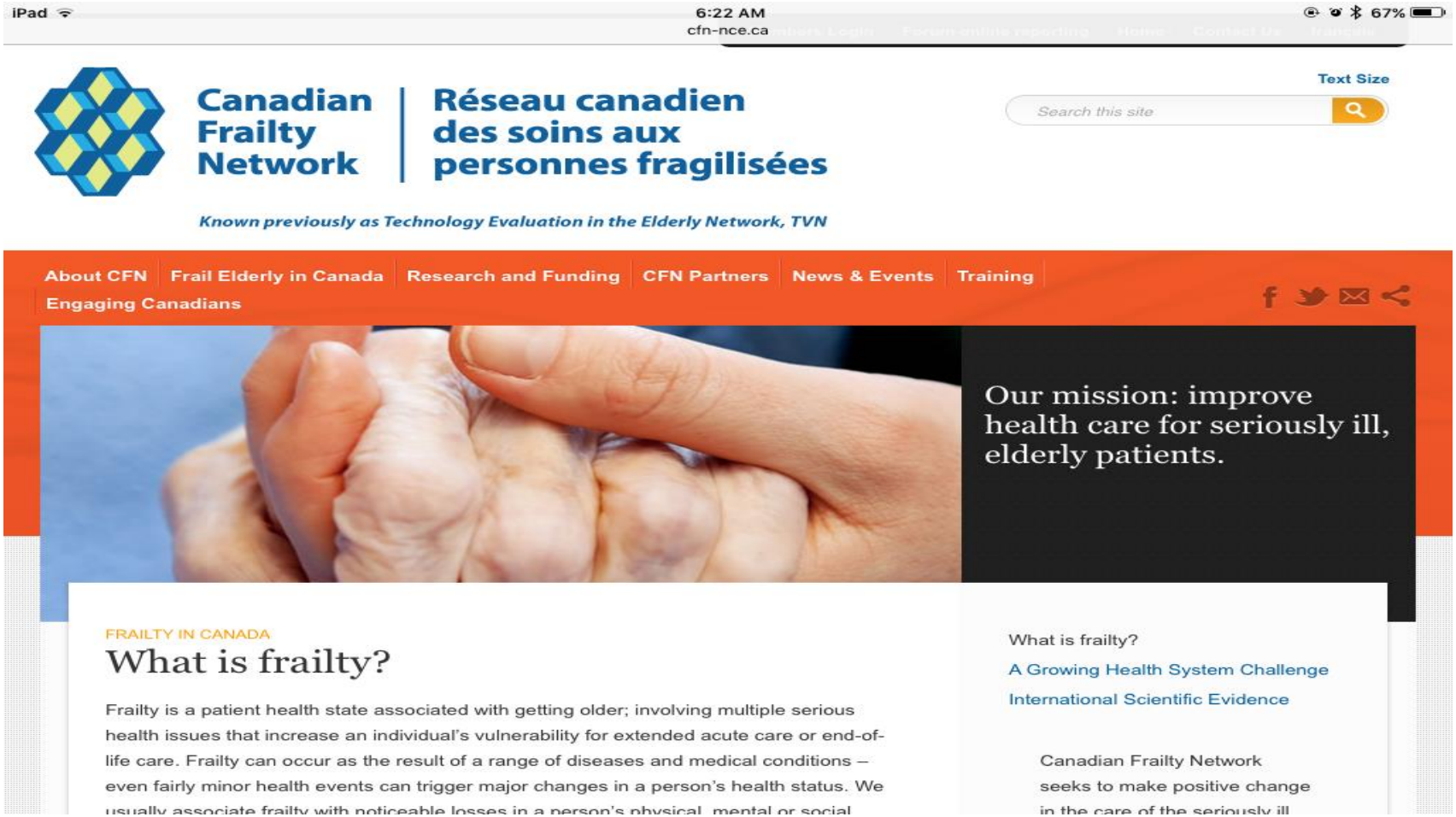
I've come to know that storing health
Is better far than storing wealth;
That smug success has little worth
Besides the simple joys of earth;
That Fame is but a bubble brief,
And glory vain beyond belief.

And so, frail creatures of a day
Let's have a good time while we may,
And do the very best we can
To give one to our fellow man;
Knowing that all will end with Death,
Let's joy with every moment's breath;
And lift our heads like blossoms blithe
To meet at last the Swinging Scythe.

Robert William Service
(1874-1958)

Canadian Frailty Network (Formerly TVN)

www.cfn-nce.ca



Preventive Medicine . Then and Now

Anticipating an aging world
Public & Professional education/training
Recognition of Frailty,Delirium & Dementia
Advance Life and Care Planning
Enhanced primary health care
Supportive Care for Community Caregivers
Urgent community response and support
Appropriate hospital avoidance
Avoidance of “Problematic Polypharmacy”
Identifying C.I. and Frailty in ED and ACH
Accurate diagnosis of geriatric syndromes
Elder-friendly/Dementia friendly CTY&ACH
Acute and post acute rehabilitative care
Palliative approach in frailty and dementia

Selected References on Frailty

- Age and Ageing (virtual edition) and links to around 30 key papers
- http://www.oxfordjournals.org/our_journals/ageing/frailty_virtual_issue.html
-
- BGS Fit for Frailty
- ttp://www.bgs.org.uk/index.php/fit-for-frailty
- http://www.bgs.org.uk/index.php/fitforfrailty-2m
- Scotland NHS
- http://www.healthcareimprovementscotland.org/our_work/person-centred_care/opac_improvement_programme/frailty_report.aspx
- http://www.healthcareimprovementscotland.org/our_work/person-centred_care/opac_improvement_programme/delirium_toolkit.aspx
- http://www.healthcareimprovementscotland.org/our_work/person-centred_care/opac_improvement_programme/frailty_report.aspxhttp://www.bgs.org.uk/index.php/fit-for-frailty

If we don't build it, they'll come anyway

http://www.huffingtonpost.ca/russell-williams/aging-population-problems-canada_b_8631236.html 2015-11-15

Summary

- Implications of Demographic changes in Canada for health care delivery
- Ways of defining Frailty.
- Challenges in Recognition and defining prevalence
- Uncertainty and Risk in Medicine- particularly in medicine of Old age
- The "Frailty Journey"
- Frailty and health care systems
- Frailty initiatives in other countries