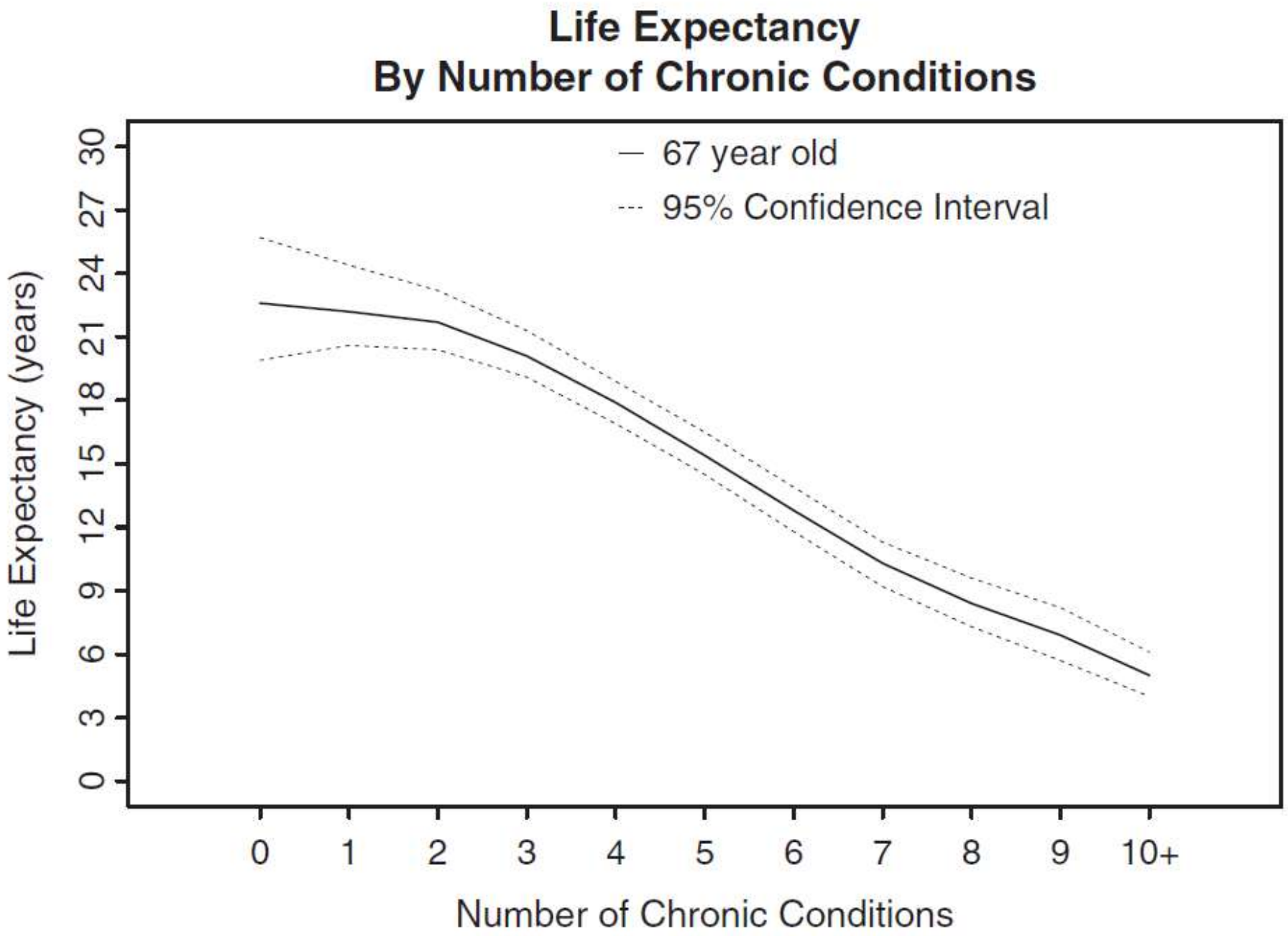


DuGoff EH et al. Med Care (2014)

Fragilità

- Più facile riconoscerla che definirla
- Una disregolazione dei sistemi di risposta agli stress, responsabili della ***resilienza***

- … Resilienza = In psicologia, la capacità di un individuo di affrontare e superare un evento traumatico o un periodo di difficoltà.

Fragilità

- Più facile riconoscerla che definirla
- Una disregolazione dei sistemi di risposta agli stress, responsabili della ***resilienza***

- Esita in:
  - perdita delle capacità ***omeostatiche***
  - aumentata suscettibilità agli ***stress***
  - emersione di un ***fenotipo sindromico*** con caratteristiche distintive, predittivo di una varietà di esiti clinici avversi

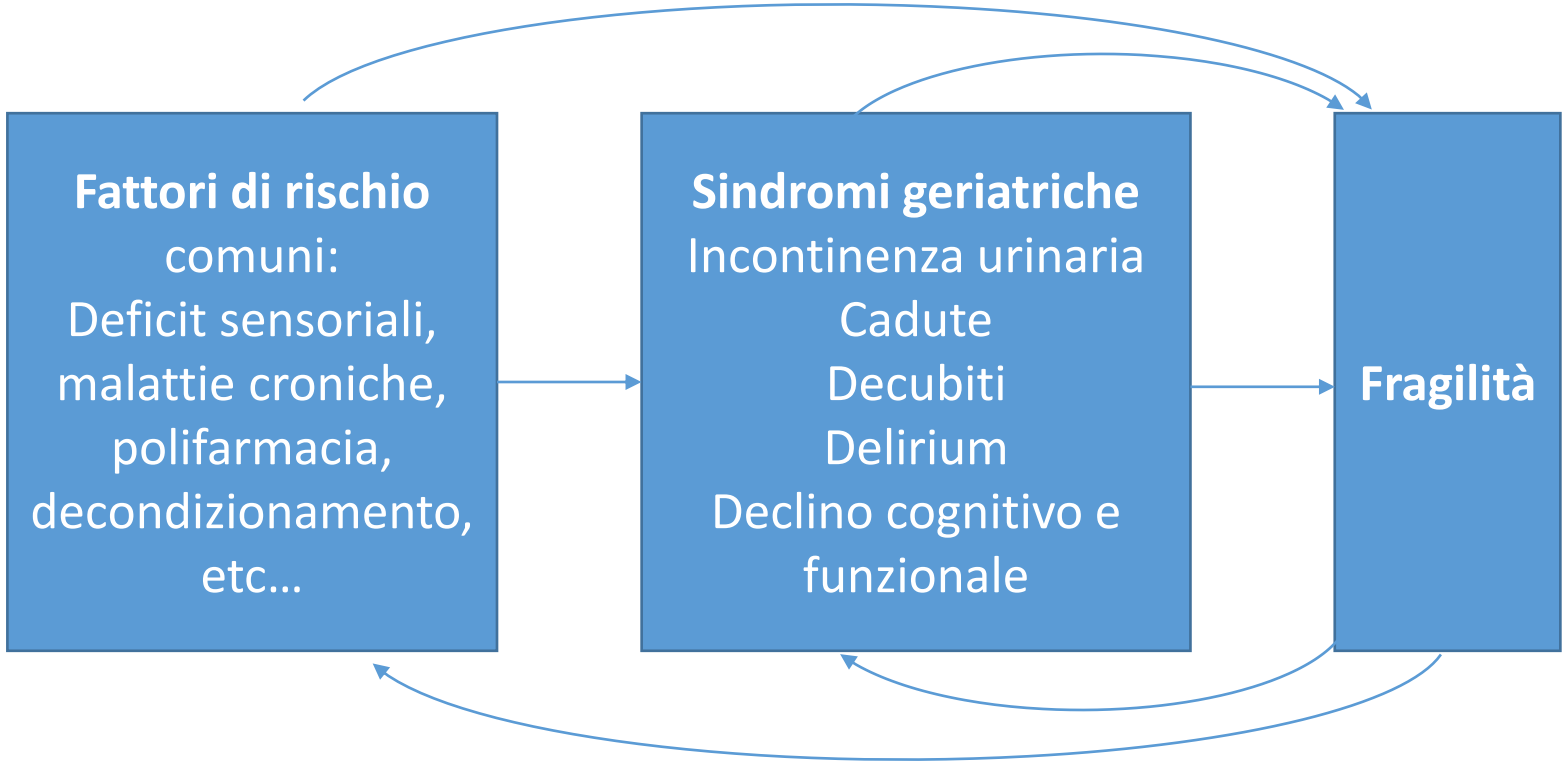
Fragilità
la definizione internazionale

- Una sindrome medica a cui contribuiscono molte cause, caratterizzata da diminuite forza, resistenza e funzione
  - Aumenta la vulnerabilità di un individuo nel divenire dipendente da altri e/o morire
  - Predittiva di complicanze in ambito medico e chirurgico
  - Non è sinonimo di età avanzata!

Morley JE, et al. *J Am Med Dir Assoc*. 2013;14(6):392–7.

Sindromi geriatriche, fragilità

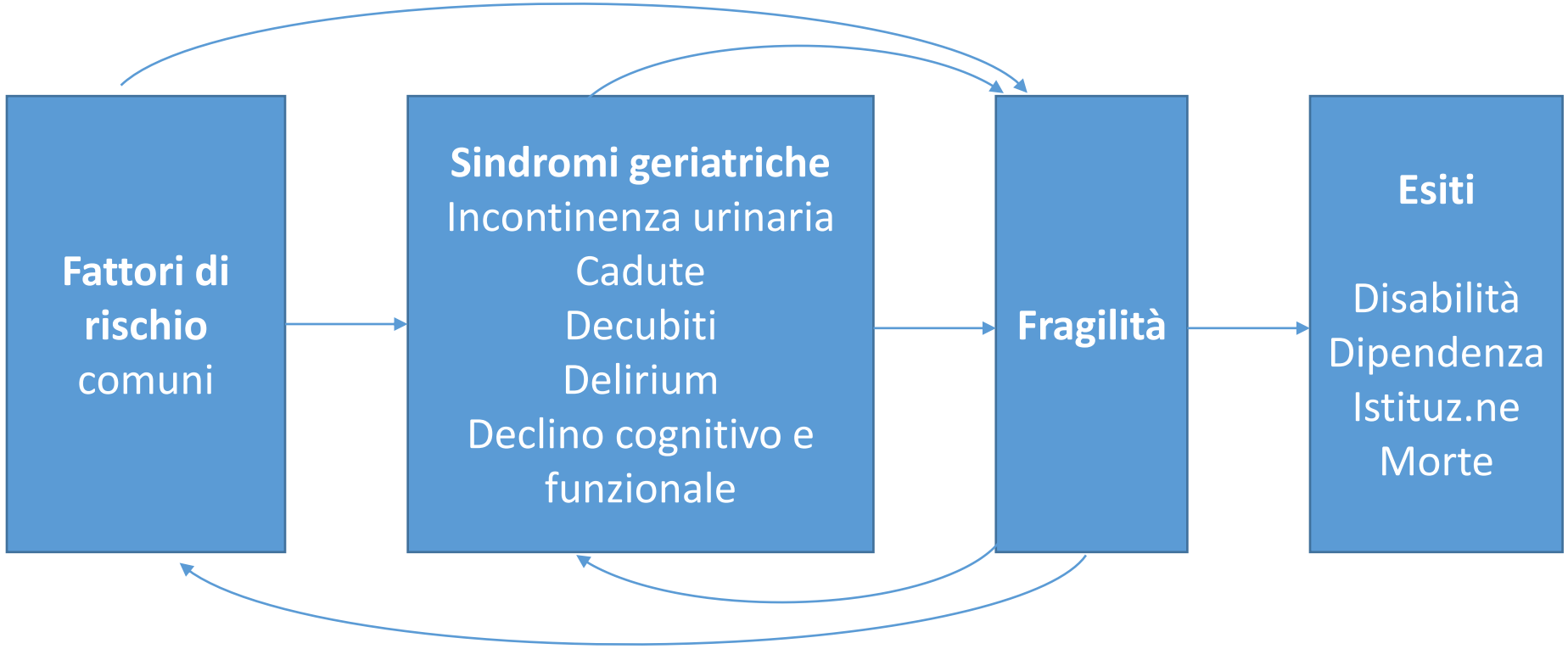
dai fattori di rischio agli esiti



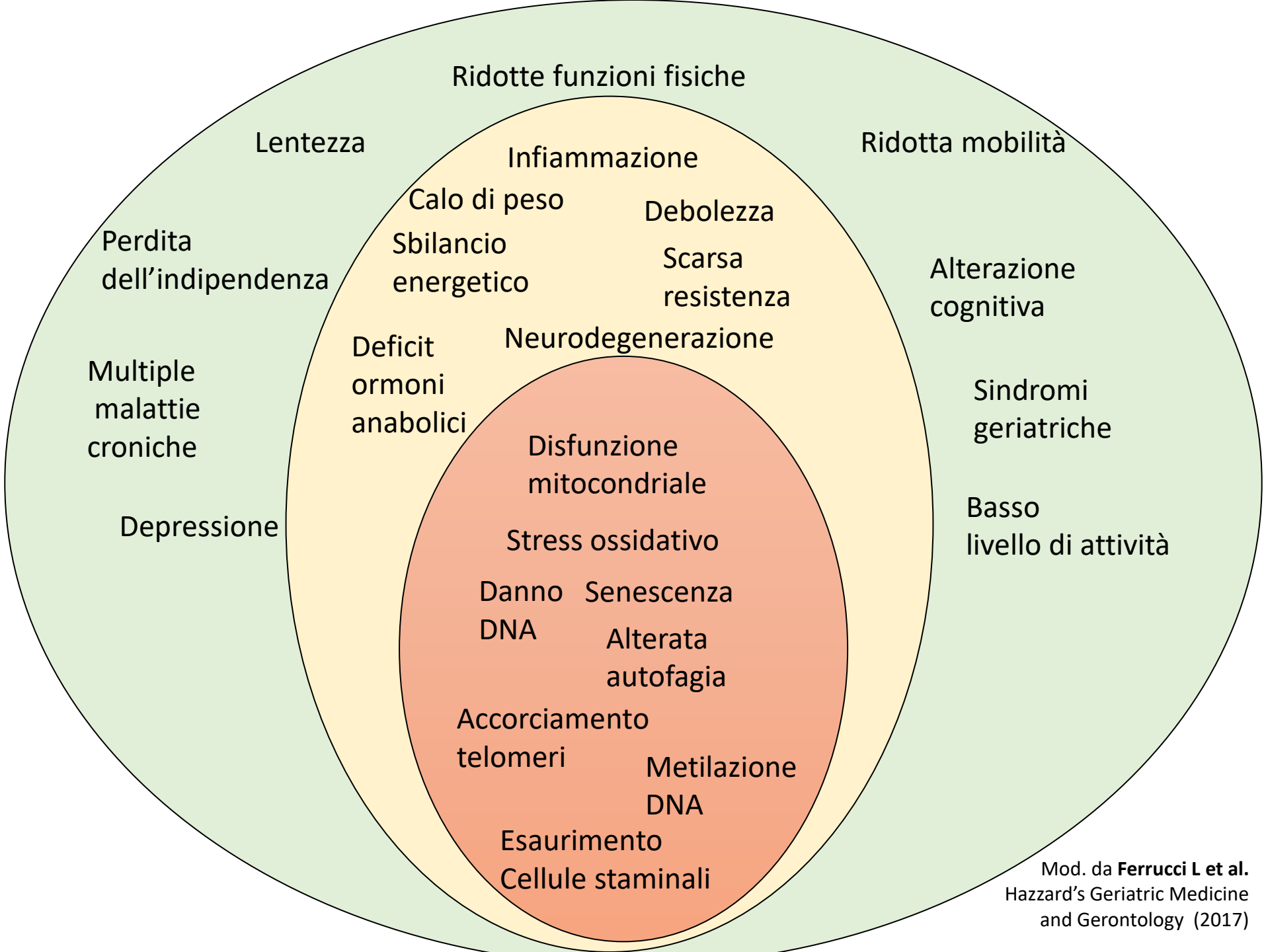
Da Inouye SK et al. JAGS 2007

Sindromi geriatriche, fragilità

dai fattori di rischio agli esiti



Da Inouye SK et al. JAGS 2007



Mod. da **Ferrucci L et al.** Hazzard's Geriatric Medicine and Gerontology (2017)

Clinical Frailty Scale

CLINICAL FRAILTY SCALE

1	**VERY FIT**	People who are robust, active, energetic and motivated. They tend to exercise regularly and are among the fittest for their age.
2	**FIT**	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**, even if occasionally symptomatic, but often are **not regularly active** beyond routine walking.
4	**LIVING WITH VERY MILD FRAILTY**	Previously "vulnerable," this category marks early transition from complete independence. 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	**LIVING WITH MILD FRAILTY**	People who often have **more evident slowing**, and need help with **high order instrumental activities of daily living** (finances, transportation, heavy housework). Typically, mild frailty progressively impairs shopping and walking outside alone, meal preparation, medications and begins to restrict light housework.
6	**LIVING WITH MODERATE FRAILTY**	People who 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	**LIVING WITH SEVERE FRAILTY**	**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	**LIVING WITH VERY SEVERE FRAILTY**	Completely dependent for personal care and approaching 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 living with severe frailty.** (Many terminally ill people can still exercise until very close to death.)

SCORING FRAILTY IN PEOPLE WITH DEMENTIA

The degree of frailty generally 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.

In **very severe dementia** they are often bedfast. Many are virtually mute.

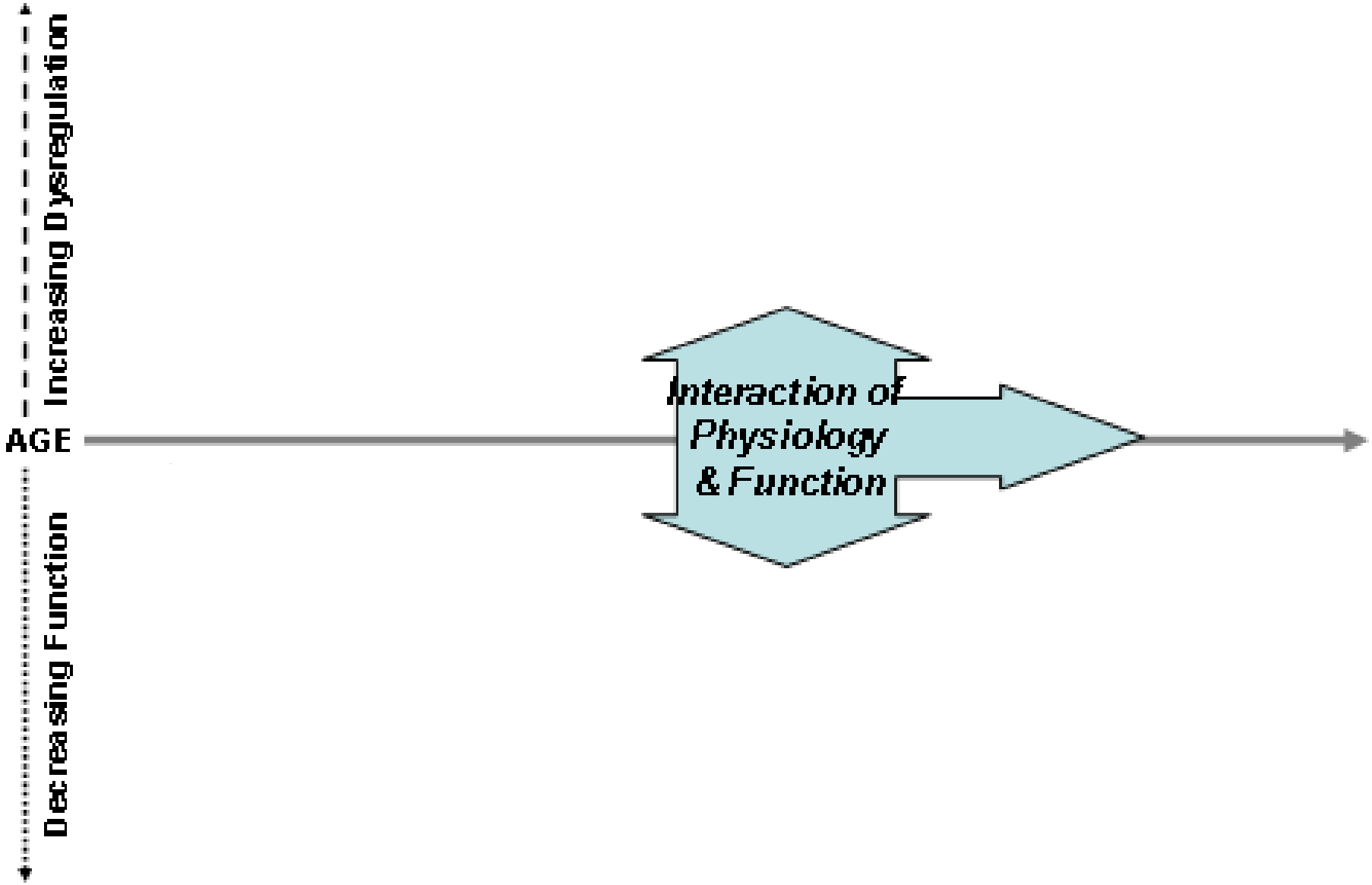
DALHOUSIE UNIVERSITY

Clinical Frailty Scale © 2005- 2020 Rockwood
Version 2.0 (EN). All rights reserved. For permission:
www.geriatricmedicineresearch.ca
Rockwood K et al. A global clinical measure of fitness and frailty in elderly people. CMAJ 2005; 173:489–495.

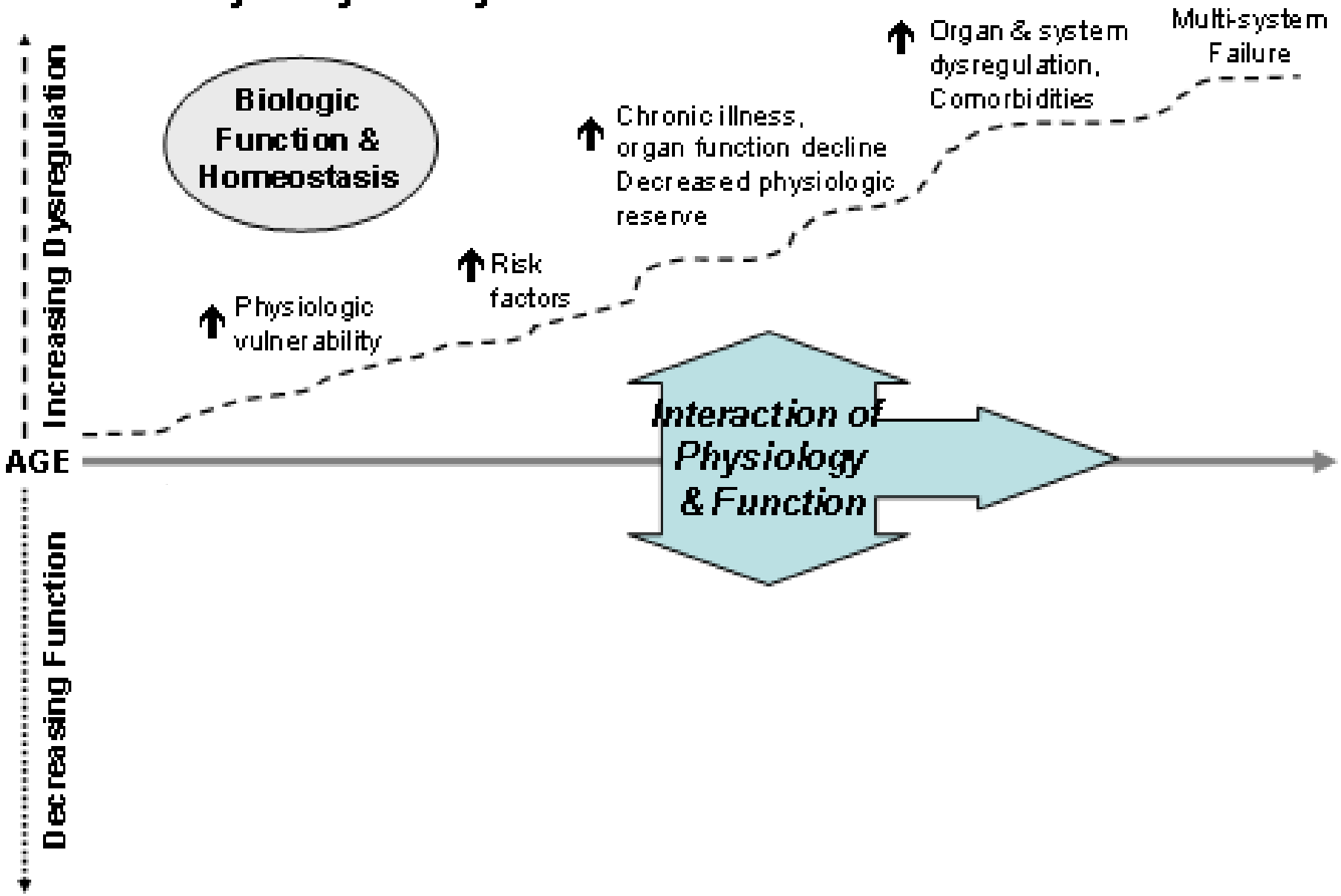
Cosa accade al paziente fragile

- Progressiva maggiore dipendenza da altri
  - Istituzionalizzazione
- Mortalità aumentata se ospedalizzato

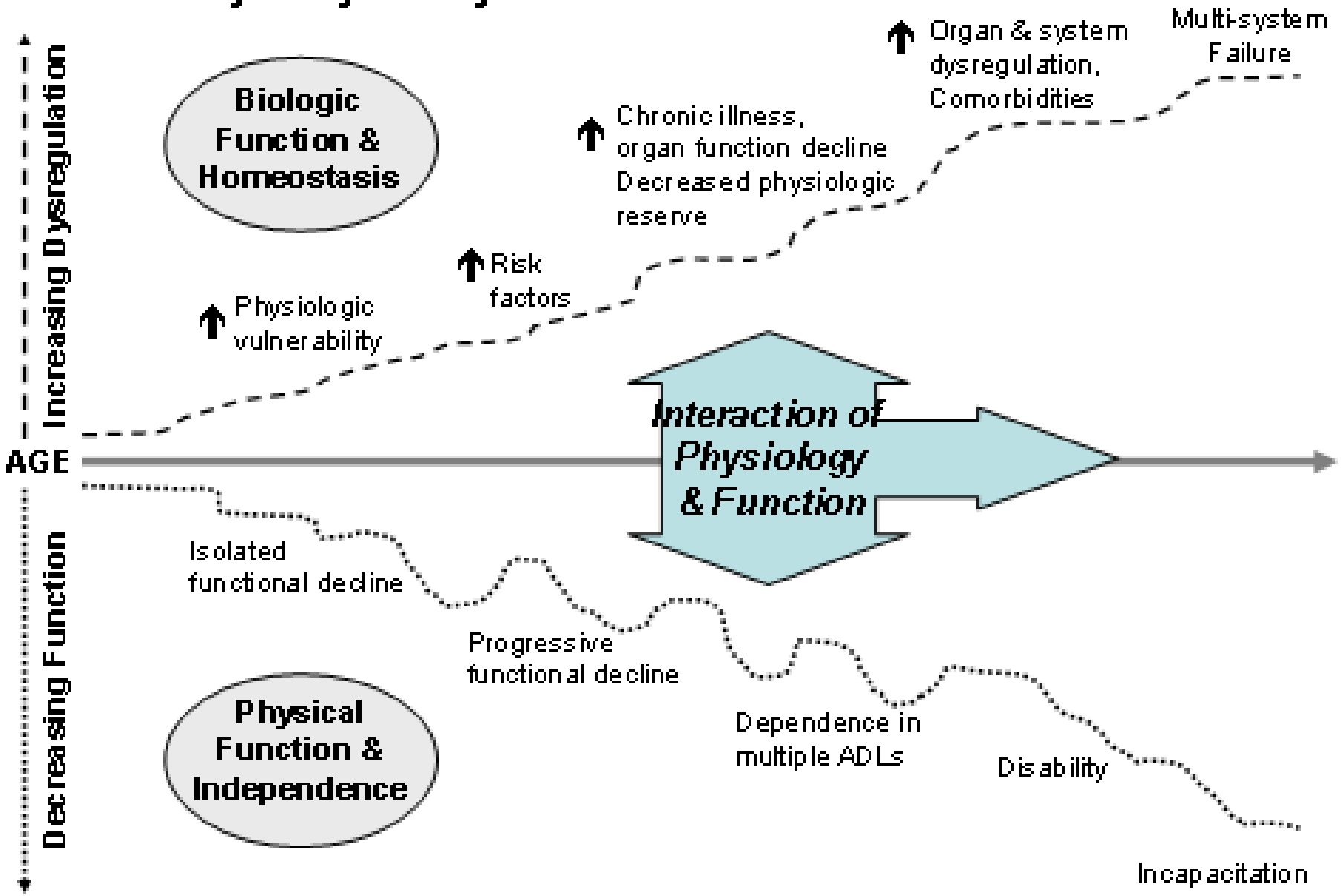
The Frailty Trajectory



The Frailty Trajectory



The Frailty Trajectory



Quando comincia la fragilità

- **Velocità nel cammino** inizia a declinare dai 30 anni
- **Memoria, capacità di ragionamento, scioltezza nel linguaggio** iniziano a declinare dai 45 anni

…. Ne consegue che un invecchiamento di successo va progettato molto presto nella vita di un individuo….

Prevenire la fragilità

invecchiamento «di successo»

Linea guida NICE: Dementia disability and frailty in later life – **mid life** approaches to delay or prevent onset [NG16]

Prevenire la fragilità
invecchiamento «di successo»

Quattro comportamenti nello stile di vita:

- Fumo: mai fumatore, ex-fumatore
- Esercizio fisico regolare
- Frutta e verdura su base quotidiana
- Poco alcol

Prevenire la fragilità

invecchiamento «di successo»

Table 1. Health Behaviour Score: Score One Point for Each of the Health Behaviours Below for a Total Score of Zero to Four

Health Behaviour	How Scored
Smoking habit	Nonsmoker = 1
Fruit and vegetable intake	Five servings or more daily as indicated by blood vitamin C = ≥50 nmol/l = 1
Alcohol intake	One or more, but less than 14 units, a week = 1. One unit = approximately 8 g of alcohol; i.e., one glass of wine, one small glass of sherry, one single shot of spirits, or one half pint of beer
Physical activity	Not inactive = 1; i.e., if sedentary occupation, at least half an hour of leisure time activity a day; e.g., cycling, swimming; or else a nonsedentary occupation with or without leisure-time activity

doi:10.1371/journal.pmed.0050012.t001

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Combined Impact of Health Behaviours and Mortality in Men and Women: The EPIC-Norfolk Prospective Population Study

Kay-Tee Khaw[1*], Nicholas Wareham[2], Sheila Bingham[3], Ailsa Welch[1], Robert Luben[1], Nicholas Day[1]

1 Department of Public Health and Primary Care, Institute of Public Health, University of Cambridge School of Clinical Medicine, Cambridge, United Kingdom, 2 Medical Research Council, Epidemiology Unit, Cambridge, United Kingdom, 3 Medical Research Council, Dunn Nutrition Unit, Cambridge, United Kingdom

Prevenire la fragilità

invecchiamento «di successo»

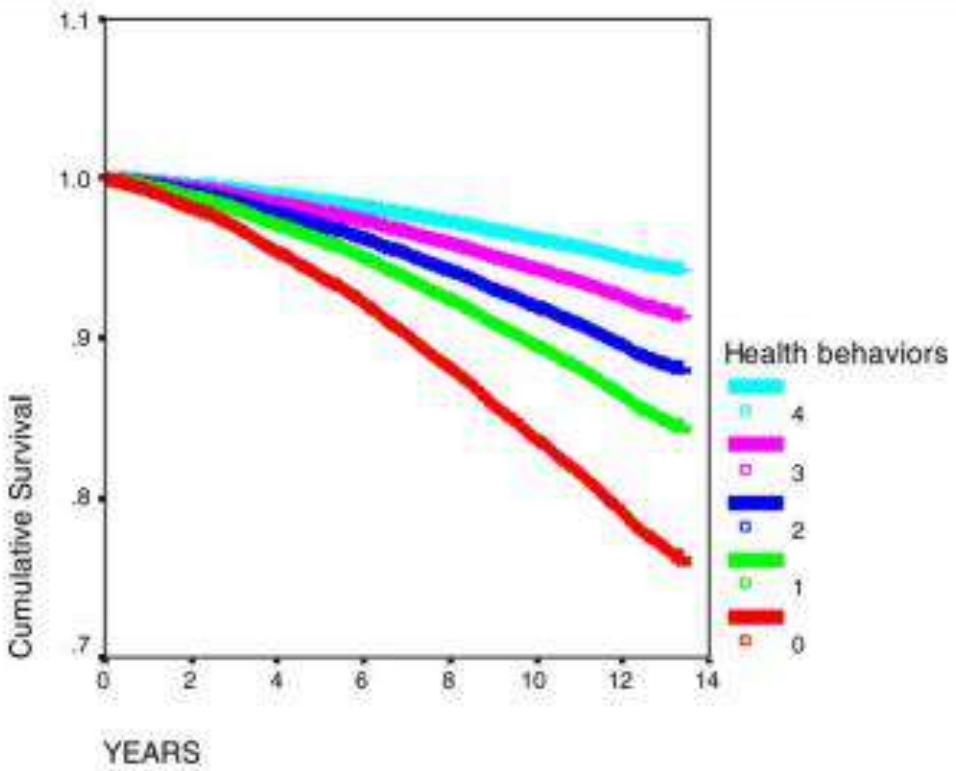

Figure 1. Survival Function According to Number of Health Behaviours in Men and Women Aged 45–79 Years without Known Cardiovascular Disease or Cancer, Adjusted for Age, Sex, Body Mass Index and Social Class, EPIC-Norfolk 1993–2006

doi:10.1371/journal.pmed.0050012.g001

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Prevenire la fragilità
invecchiamento «di successo»

Quattro comportamenti nello stile di vita:

- Fumo: mai fumatore, ex-fumatore
- Esercizio fisico regolare
- Frutta e verdura su base quotidiana
- Poco alcol

- 4/4 vs 0/4: sopravvivenza 14 anni più lunga (Khaw et al. 2008), qualità di vita migliore (Myint et al. 2011)

Stile di vita

Il mantenimento dello stato di salute passa per un approccio comportamentale in buona parte sovrapponibile a quanto detto precedentemente in merito alla prevenzione della fragilità e applicabile anche al giovane:

- Dieta (incluso alcol)
- Astensione dal fumo di sigaretta
- Esercizio fisico
  - > 65 anni rischio cadute

N.=3982 (60.5% F) di Dijon; 65+

F/up 12 anni, al termine 1236 con disabilità

Comportamenti non salutari

- attività fisica bassa/intermedia
- consumo di frutta e verdura <1 volta al giorno
- fumo attuale o ex-fumo di breve durata

Artaud F et al.
BMJ (2013)

Unhealthy behaviours and disability in older adults: Three-City Dijon cohort study

OPEN ACCESS

Fanny Artaud *PhD candidate*[1,2], Aline Dugravot *statistician*[1,2], Séverine Sabia *research associate*[3],