UNIVERSITÀ
DEGLI STUDI
DI MILANO

FONDAZIONE IRCCS CA' GRANDA
OSPEDALE MAGGIORE POLICLINICO
Sistema Sanitario Regione Lombardia

Active Ageing:
L'anziano attivo e in salute, prospettive e impatto per la società

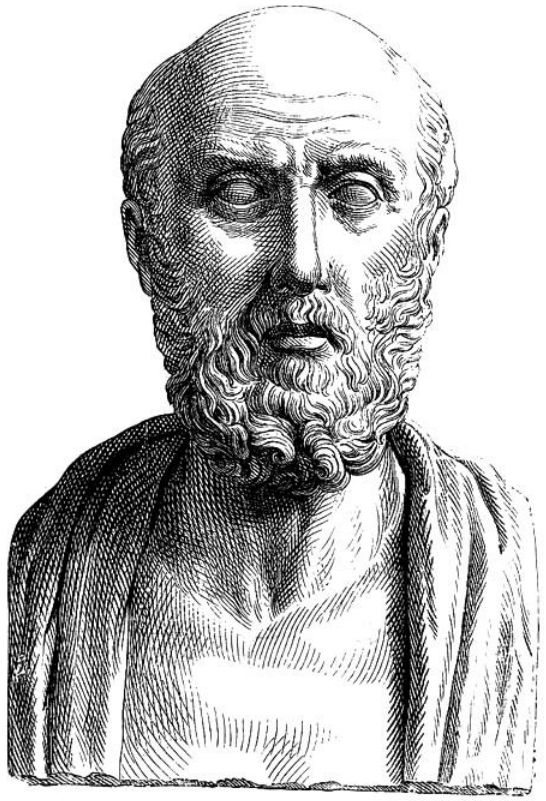
Matteo Cesari, MD, PhD

Palazzo Lombardia – Milano, 18 settembre 2019

Active Ageing:
L'anziano attivo e in **salute**, prospettive e impatto per la società

"...Se fossimo in grado di fornire a ciascuno la giusta dose di nutrimento ed esercizio fisico, né in difetto né in eccesso, avremmo trovato il percorso verso la salute…"

Ippocrate di Coo (460-377 AC)



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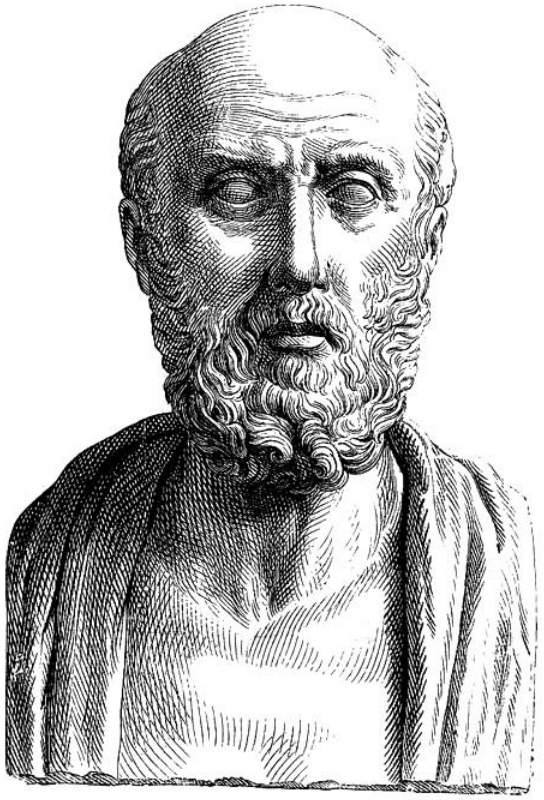


B. TEXT OF THE CONSTITUTION OF THE WORLD HEALTH ORGANIZATION

THE STATES Parties to this Constitution declare, in conformity with the Charter of the United Nations, that the following principles are basic to the happiness, harmonious relations and security of all peoples :

Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.

The enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being without distinction of race, religion, political belief, economic or social condition.

The health of all peoples is fundamental to the attainment of peace and security and is dependent upon the fullest co-operation of individuals and States.

The achievement of any State in the promotion and protection of health is of value to all. Unequal development in different countries in the promotion of health and control of disease, especially communicable disease, is a common danger.

Healthy development of the child is of basic importance ; the ability to live harmoniously in a changing total environment is essential to such development.

The extension to all peoples of the benefits of medical, psychological and related knowledge is essential to the fullest attainment of health.

Informed opinion and active co-operation on the part of the public are of the utmost importance in the improvement of the health of the people.

Governments have a responsibility for the health of their peoples which can be fulfilled only by the provision of adequate health and social measures.

ACCEPTING THESE PRINCIPLES, and for the purpose of co-operation among themselves and with others to promote and protect the health of all peoples, the Contracting Parties agree to the present Constitution and hereby establish the World Health Organization as a specialized agency within the terms of Article 57 of the Charter of the United Nations.

BMJ

How should we define health?

The WHO definition of health as complete wellbeing is no longer fit for purpose given the rise of chronic disease. **Machteld Huber and colleagues** propose changing the emphasis towards the ability to adapt and self manage in the face of social, physical, and emotional challenges

Limitations of the WHO definition:

1. Medicalisation of the society
   ("...state of complete [...] well-being...")

BMJ 2011;343:d4163 doi: 10.1136/bmj.d4163

The more you look, the more you will find

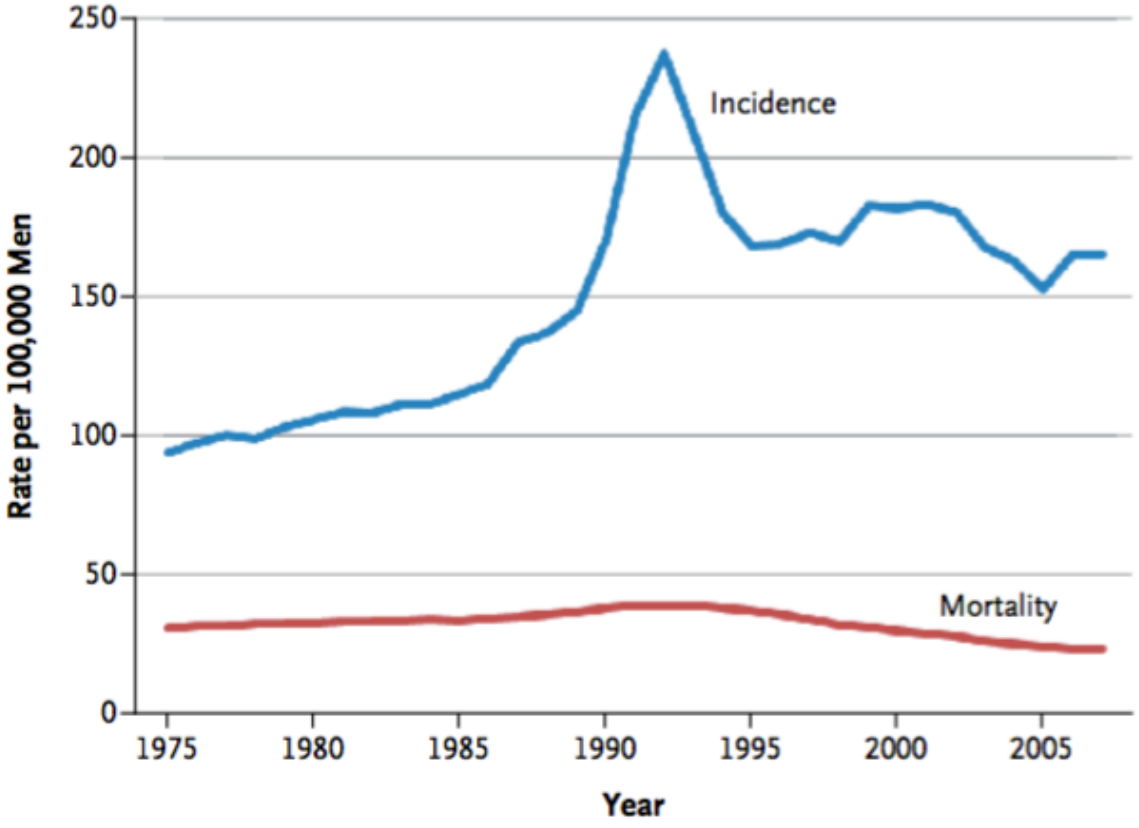
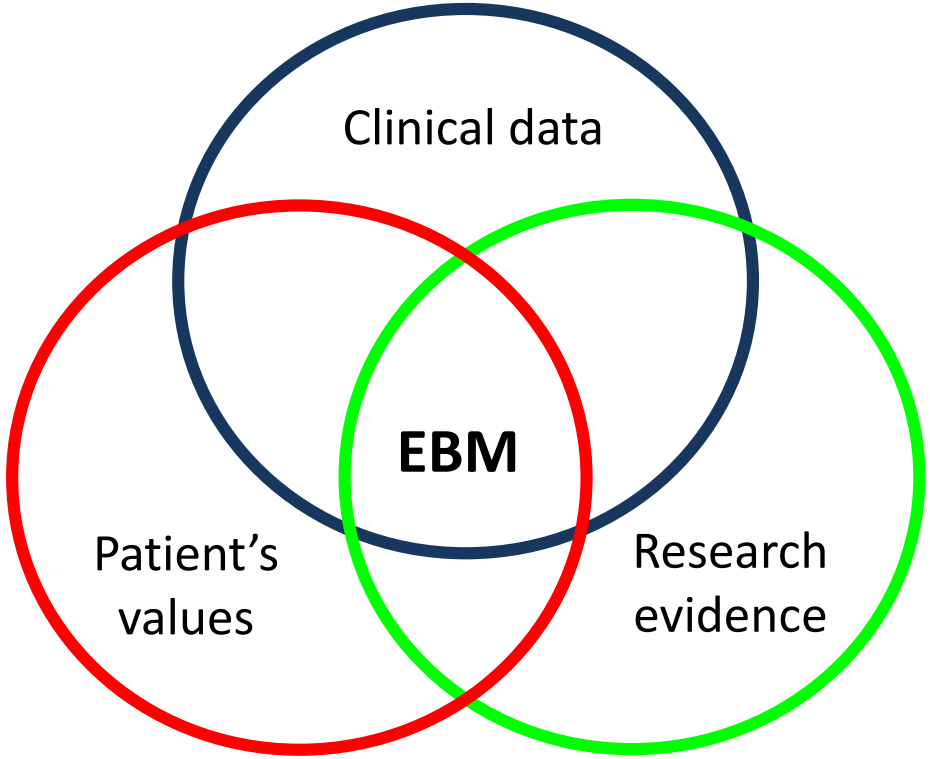


Figure 1. Age-Adjusted Incidence of and Mortality from Prostate Cancer in the United States, 1975–2007.

Altekruse SF et al. SEER cancer statistics review 1975- 2007. Bethesda, MD: National Cancer Institute, 2010.

Evidence-based medicine

The judicious and systematic application of research evidence to the care of individual patients integrated with clinical judgment, expertise, and patient's values and preferences



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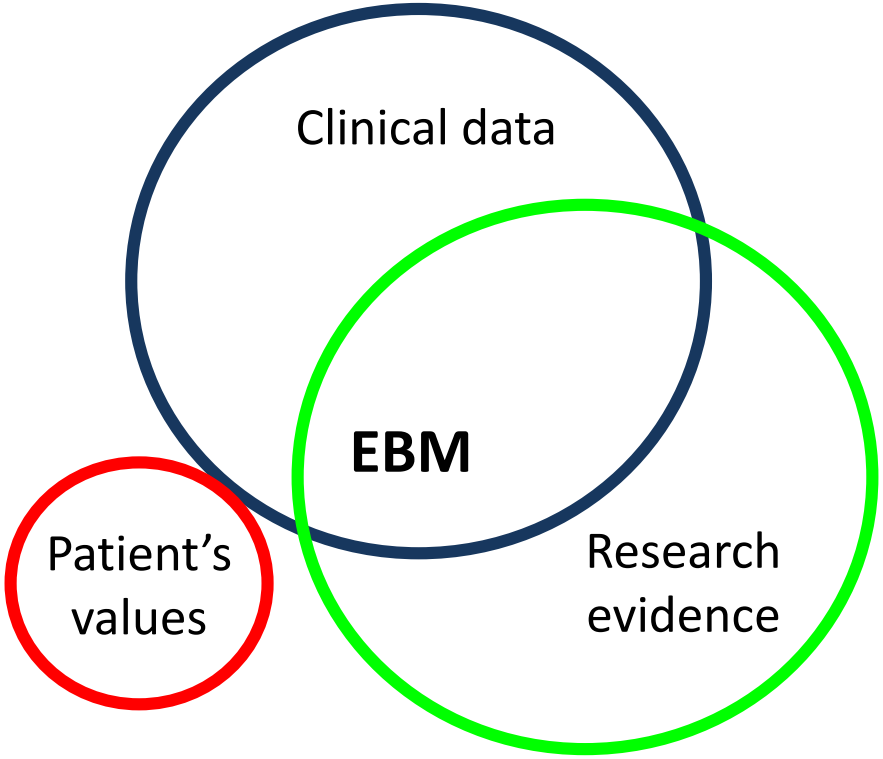

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   (acute vs. chronic diseases)

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Weaknesses of *disease* and *multimorbidity*

The definition is related to:

- Current knowledge of the condition
- Characteristics of the diagnostic instrument
- Priorities in the formulation of the diagnosis
- Different clinical relevance of diseases
- Access to health services

Cesari M, et al. *J Am Med Dir Assoc* 2017;18(4): 361–64

What proportion of older adults in hospital are frail?

Published Online
April 25, 2018
http://dx.doi.org/10.1016/
S0140-6736(18)30927-5
See Articles page 1275

Despite the increasing level of knowledge about individual illnesses, modern health-care systems seem lost when seeing patients whose diseases come not one at a time, but all at once—especially when they come with equally complex social needs. Although some geriatricians proclaimed the end of the disease era[1] to focus on the complexity of frailty in geriatric assessment,[2] the argument is falling flat. Disease-focused specialists who push on with the only course they know sometimes decry their frail patients as being unsuitable or requiring social support or failing to cope or thrive.[3] Many hospitals—and practitioners—still somehow expect patients to present with primary complaints that give rise to well defined problems, which they can manage successfully using pathways that can be audited, such as time to thrombolytic event in an acute stroke or myocardial infarction.

How does health care get on track? Language should be the starting point. Elderly people whose multiple, interacting medical and social problems put them at greater risk of adverse outcomes have come to be called frail. Hospitals must be encouraged to expect and thereby plan for frail patients as a part of what is required of them. To make this requirement clear, they need the right tools.

In *The Lancet*, Thomas Gilbert and colleagues[4] used International Statistical Classification of Diseases and Related Health Problems, Tenth Revision codes in electronic records to develop a hospital risk stratification tool. The tool was validated in a large English inpatient database (n=1 013 590), and its generalisability tested using various hospitals. Frail or non-frail information was dichotomised and frailty further graded into low, intermediate, and high risk. In a cluster analysis, these frail groups accounted for a fifth of patients and almost a half of all hospitalisation days. The tool classified individual mortality risk no more than moderately well, but, as the investigators point out, individual risk stratification was not their objective. Instead, their goal was to identify "a group of patients who are at greater risk of adverse outcomes and for whom a frailty-attuned approach might be useful".

A metric that identifies for hospitals the extent to which they are serving patients with frailty should signal the need to change from a most responsible diagnosis model to practices that can reduce the hazards of hospital stays for patients who are frail, and perhaps even focus on the goals of patients and their families.[5] Stratification of risk groups might also offer a similarly useful role for the electronic frailty index, based on general practice records.[6] These hypotheses need to be tested.

To show what must change, consider a student on her first clinical rotation who encounters a patient with pneumonia. Most of what she has learned about pneumonia must now be set aside. Uncomplicated cases are rarely referred to specialty services; those patients get antibiotics and go home. Her patient cannot give a history. He is not coughing. He cannot even sit up so that she can auscultate his lungs properly, something she knows she must do. Her patient does not have a fever or an increased white cell count. Vague markings on the chest film alone support the diagnosis. No matter, the real issue, apparently, is that her patient cannot go home. She might now turn to her teachers and ask: "What have you been teaching me about pneumonia if none of it works in the patients I'm supposed to see?" More likely, insidious acculturation will lead her to conclude that this patient really does not belong in her hospital.

By contrast, those skilled in the care of older people will recognise the delirium and immobility that are typical presentations in a frail patient with pneumonia. They will ascertain whether the cognitive impairment and being bedfast are new. From this information, they will formulate a differential diagnosis and focused

"…Consider a student on her first clinical rotation who encounters a patient with pneumonia. **Most of what she has learned about pneumonia must now be set aside. Uncomplicated cases are rarely referred to specialty services**; those patients get antibiotics and go home. Her patient cannot give a history. He is not coughing. He cannot even sit up so that she can auscultate his lungs properly, something she knows she must do. Her patient does not have a fever or an increased white cell count. Vague markings on the chest film alone support the diagnosis. No matter; the real issue, apparently, is that her patient cannot go home…"

SPECIAL ARTICLES

The End of the Disease Era

Mary E. Tinetti, MD, Terri Fried, MD

The time has come to abandon disease as the focus of medical care. The changed spectrum of health, the complex interplay of biological and nonbiological factors, the aging population, and the interindividual variability in health priorities render medical care that is centered on the diagnosis and treatment of individual diseases at best out of date and at worst harmful. A primary focus on disease may inadvertently lead to undertreatment, overtreatment, or mistreatment. The numerous strategies that have evolved to address the limitations of the disease model, although laudable, are offered only to a select subset of persons and often further fragment care. Clinical decision making for all patients should be predicated on the attainment of individual goals and the identification and treatment of all modifiable biological and nonbiological factors, rather than solely on the diagnosis, treatment, or prevention of individual diseases. Anticipated arguments against a more integrated and individualized approach range from concerns about medicalization of life problems to "this is nothing new" and "resources would be better spent determining the underlying biological mechanisms." The perception that the disease model is "truth" rather than a previously useful model will be a barrier as well. Notwithstanding these barriers, medical care must evolve to meet the health care needs of patients in the 21st century. **Am J Med. 2004;116:179–185.**

"…**The time has come to abandon disease as the primary focus of medical care**. When disease became the focus of Western medicine in the 19th and early 20th century, the average life expectancy was 47 years and most clinical encounters were for acute illness. Today, the average **life expectancy** in developed countries is 74 years and increasing, and most clinical encounters are for **chronic illnesses** or **non-disease-specific complaints**…"

BMJ

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Limitations of the WHO definition:

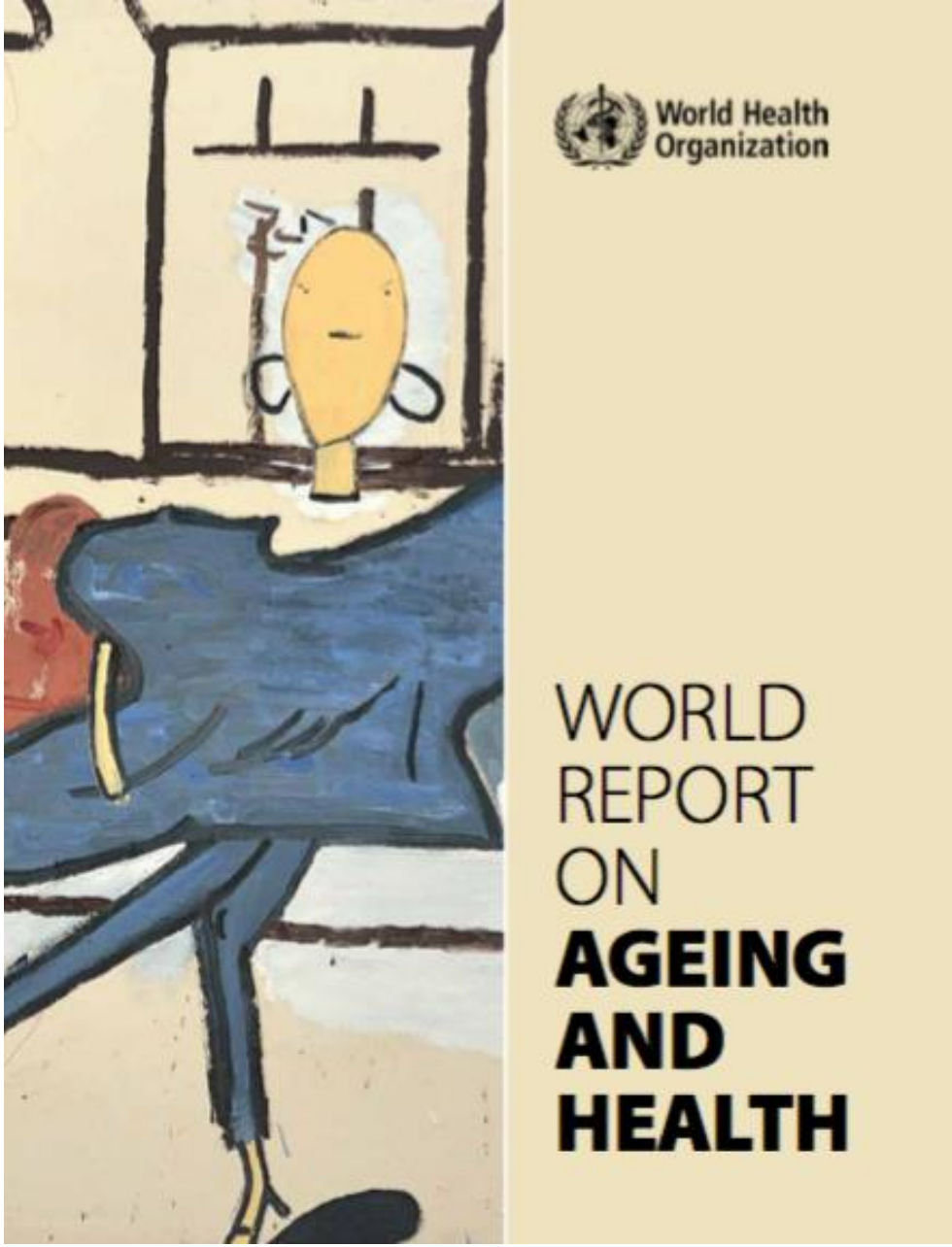
1. Medicalisation of the society
   ("...state of complete […] well-being…")

2. Disease patterns have changed over time
   (acute vs. chronic diseases)

3. Operationalisation of the definition
   ("...complete is neither operational nor measurable…")

BMJ 2011;343:d4163 doi: 10.1136/bmj.d4163

World Health Organization



www.who.int/ageing/events/world-report-2015-launch/en/

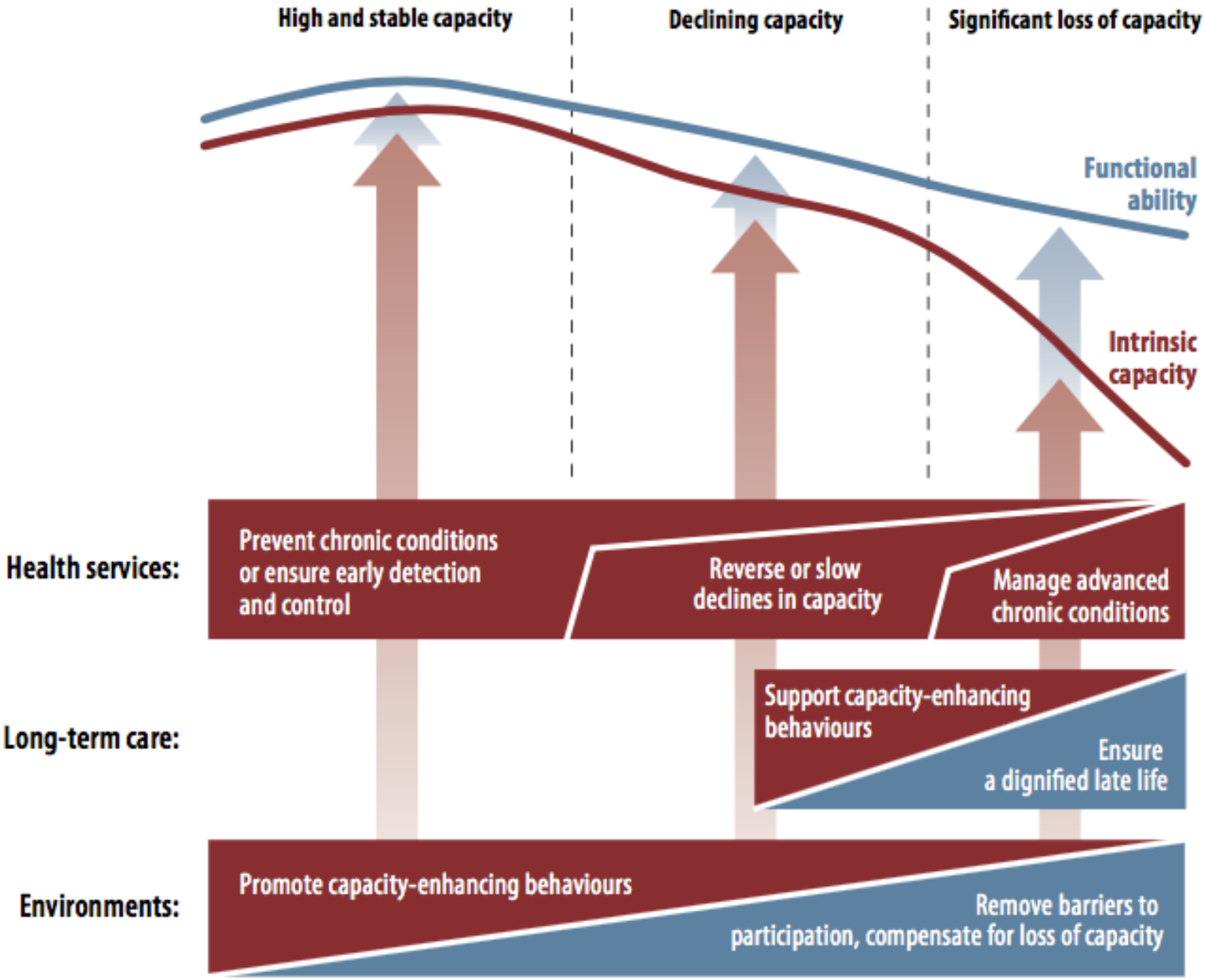
Healthy Ageing: the process of developing and maintaining the functional ability that enables well-being in older age.

Intrinsic capacity: the composite of all the physical and mental capacities of an individual.

Environments: all the factors in the extrinsic world that form the context of an individual's life.

Functional ability: the health-related attributes that enable people to be and to do what they have reason to value. It is made up of the intrinsic capacity of the individual, relevant environmental characteristics and the interactions between the individual and these characteristics.

Fig. 2.4. **A public-health framework for *Healthy Ageing:* opportunities for public-health action across the life course**



Birth to 24 months: Girls
Head circumference-for-age and Weight-for-length percentiles

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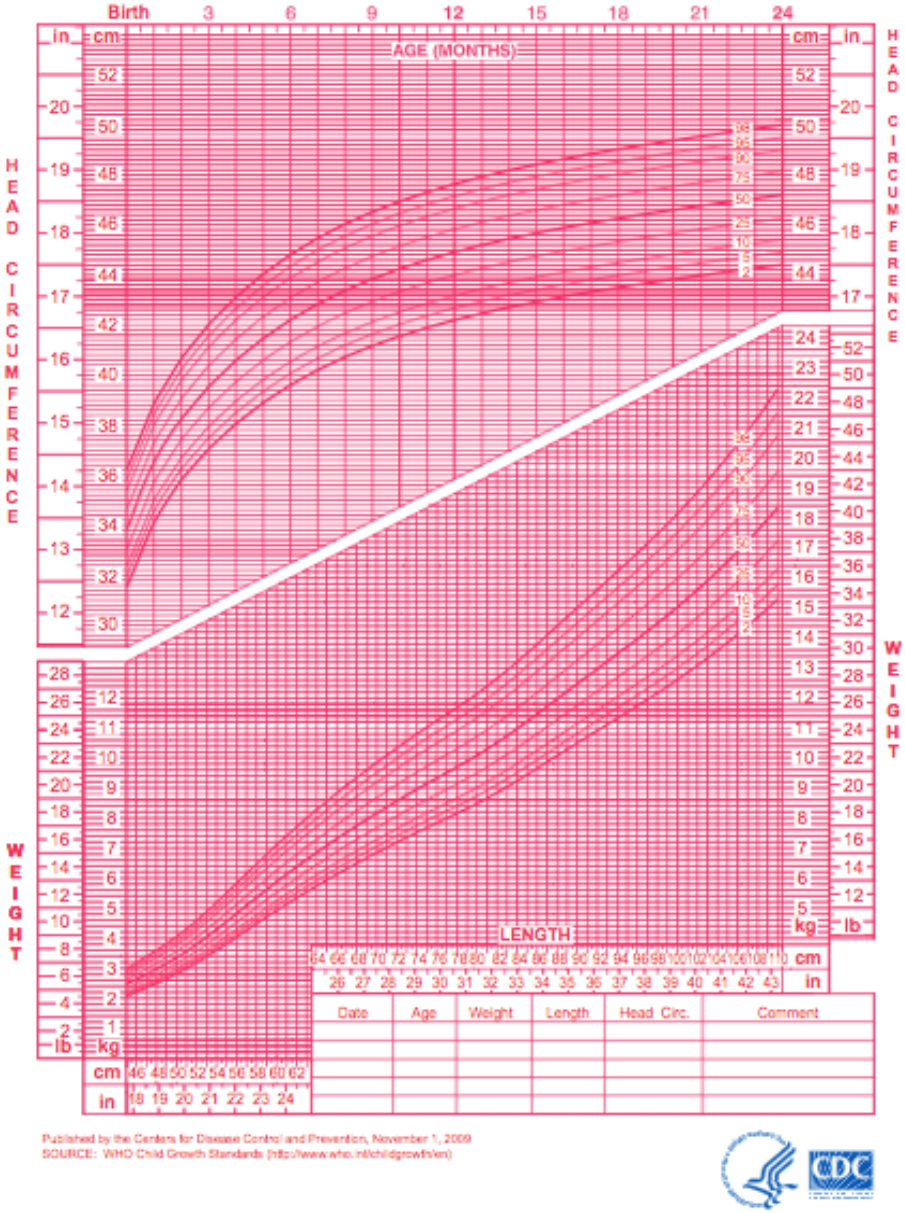

Published by the Centers for Disease Control and Prevention, November 1, 2009
SOURCE: WHO Child Growth Standards (http://www.who.int/childgrowth/en)

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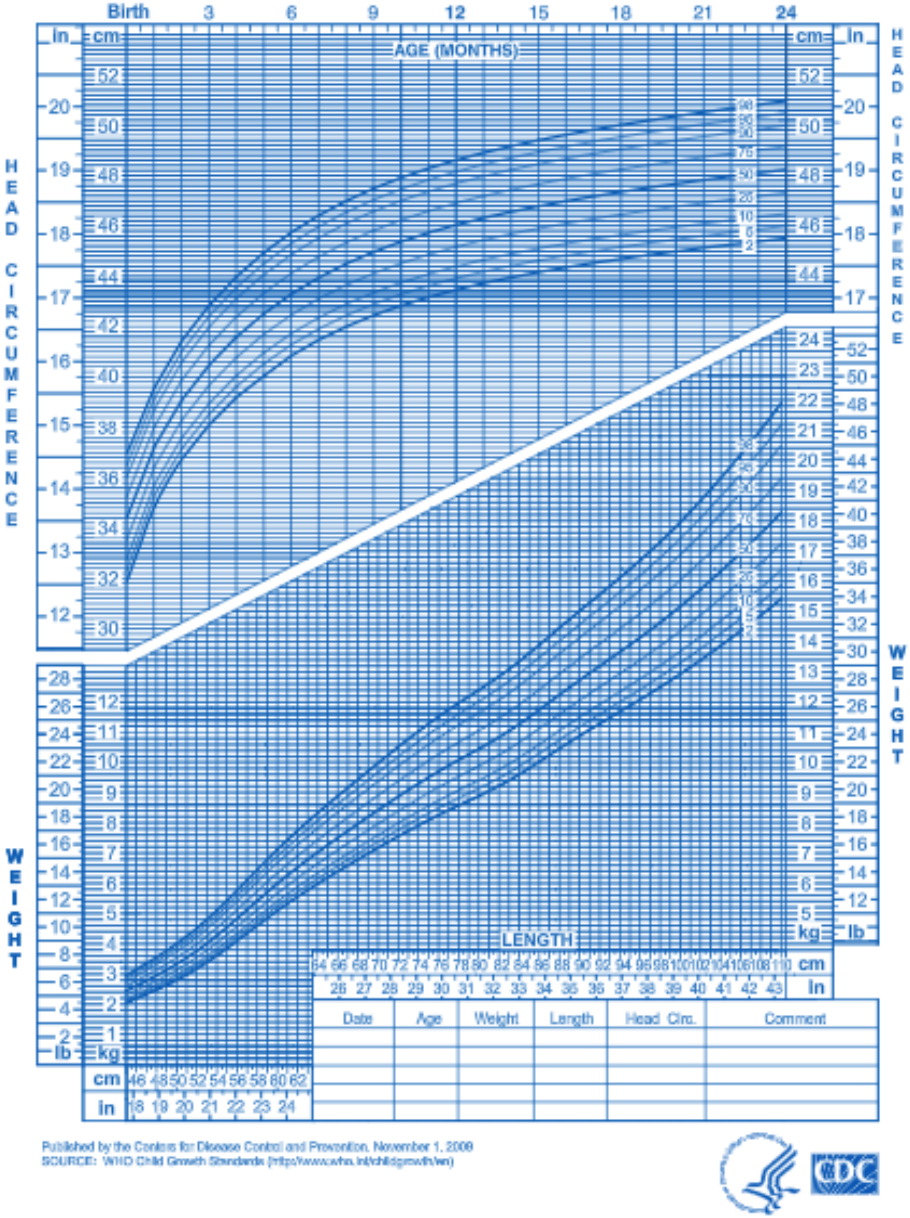

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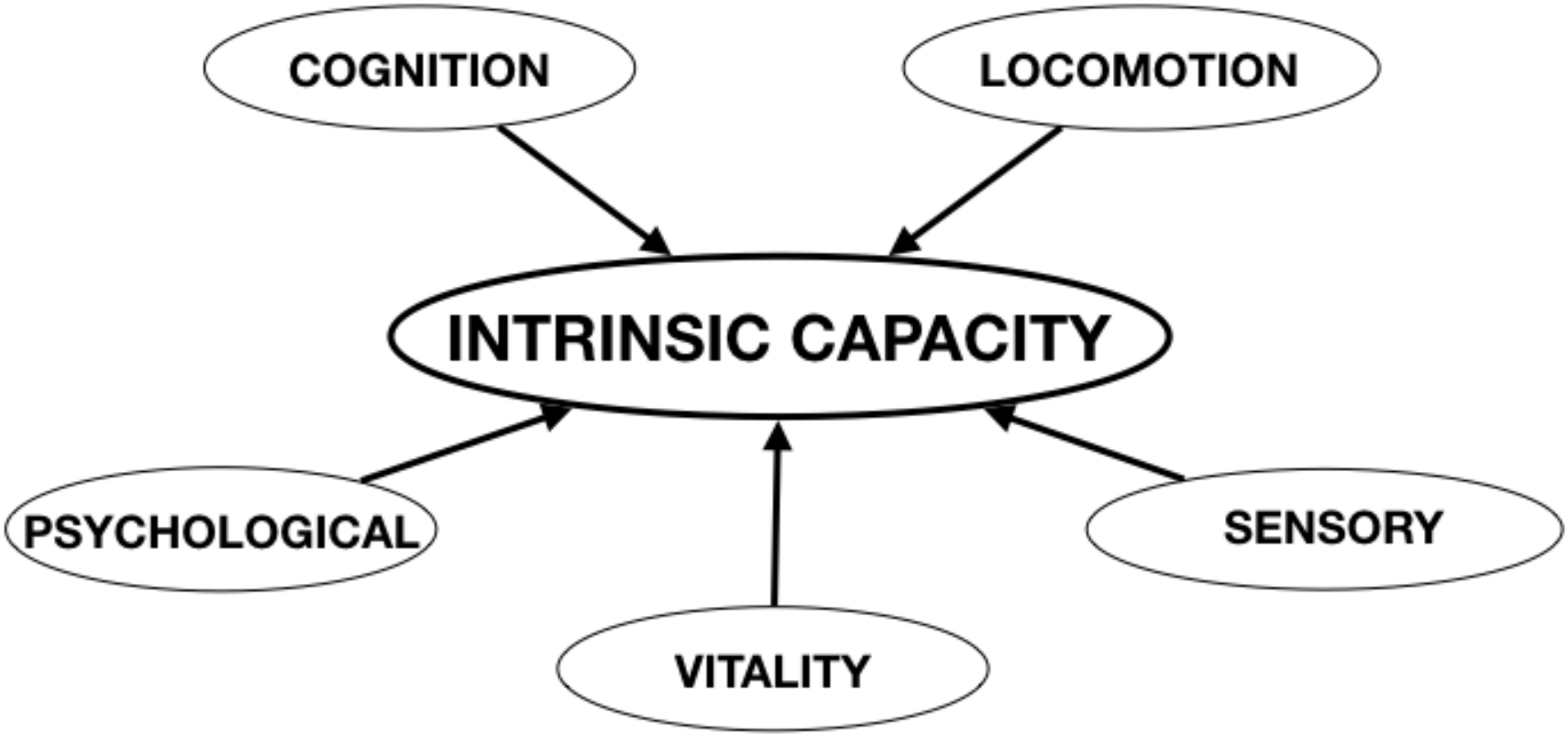


Cesari M et al. *J Gerontol A Biol Sci Med Sci* 2018;73:1653-60

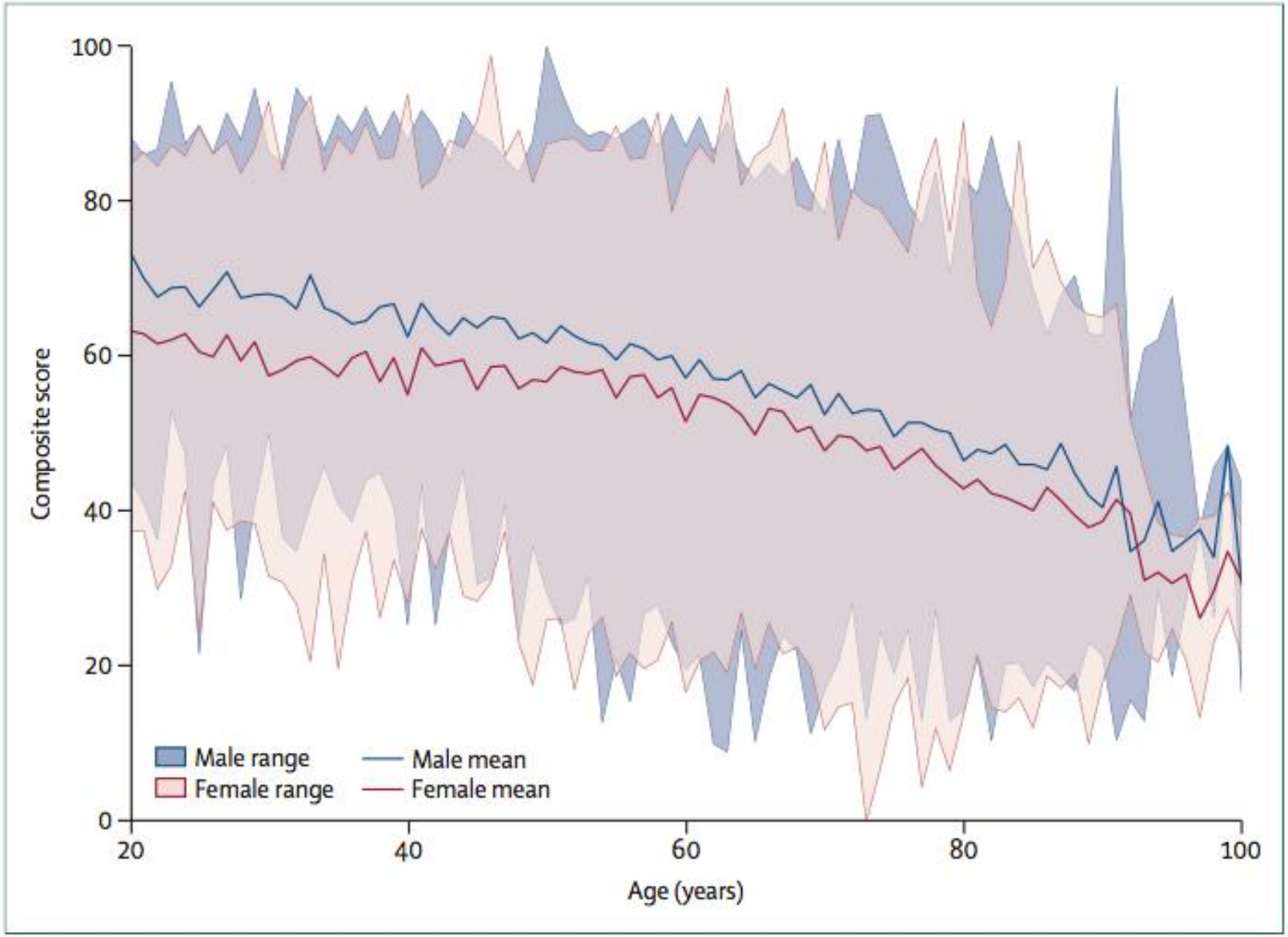
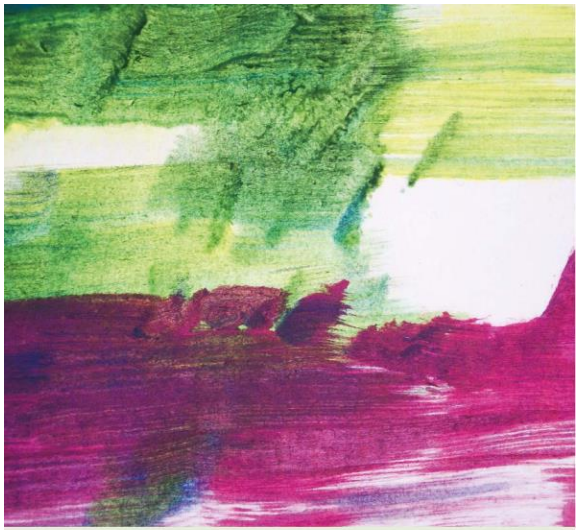


***Figure 3*: Range and mean intrinsic capacity of men and women in countries in the Study on global AGEing and adult health 2007–2010 (wave 1)[42]**

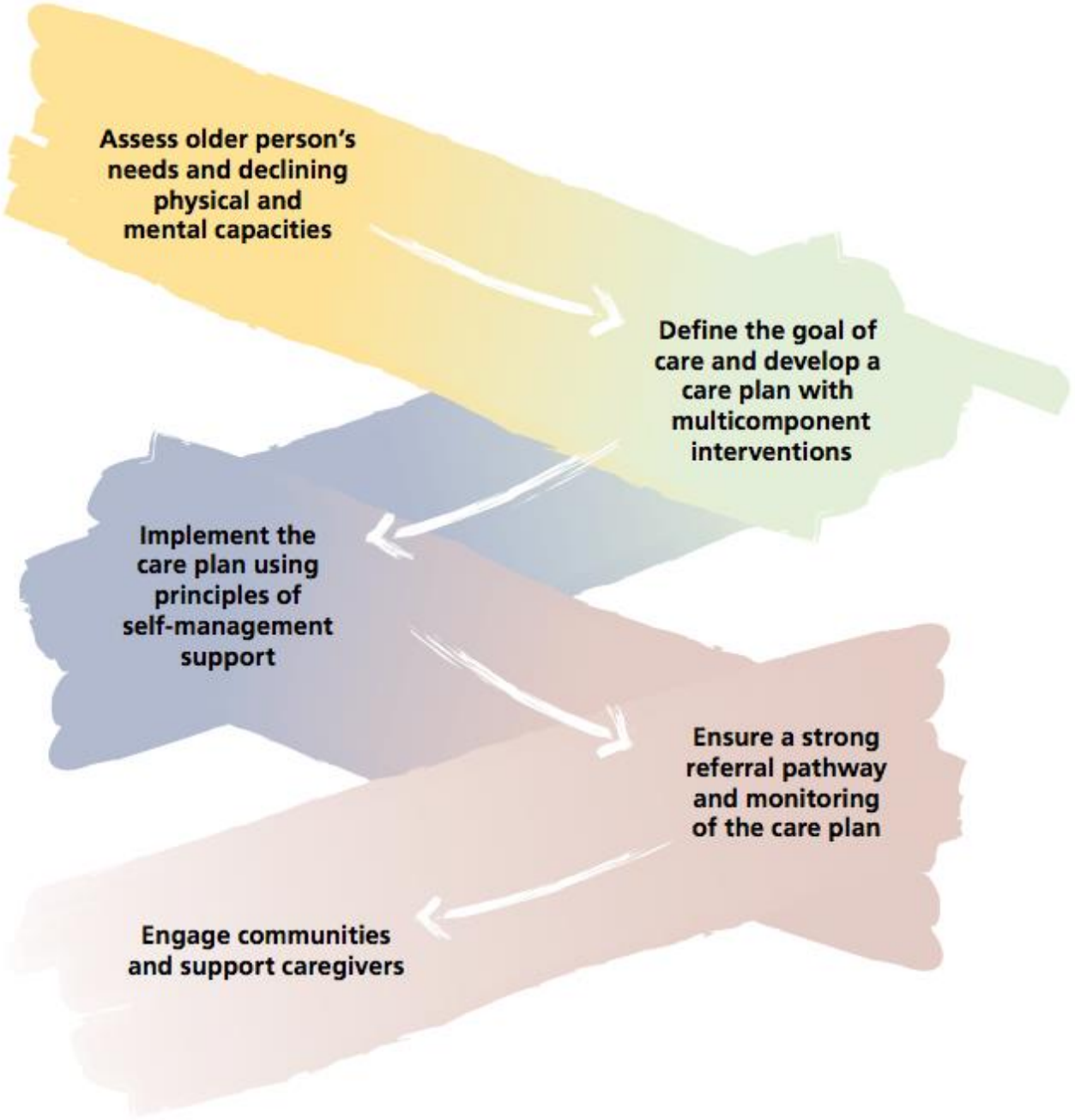
Beard JR, et al. *Lancet* 2015;387:2145-2154



Integrated care for older people

Guidelines on community-level interventions to manage declines in intrinsic capacity

World Health Organization



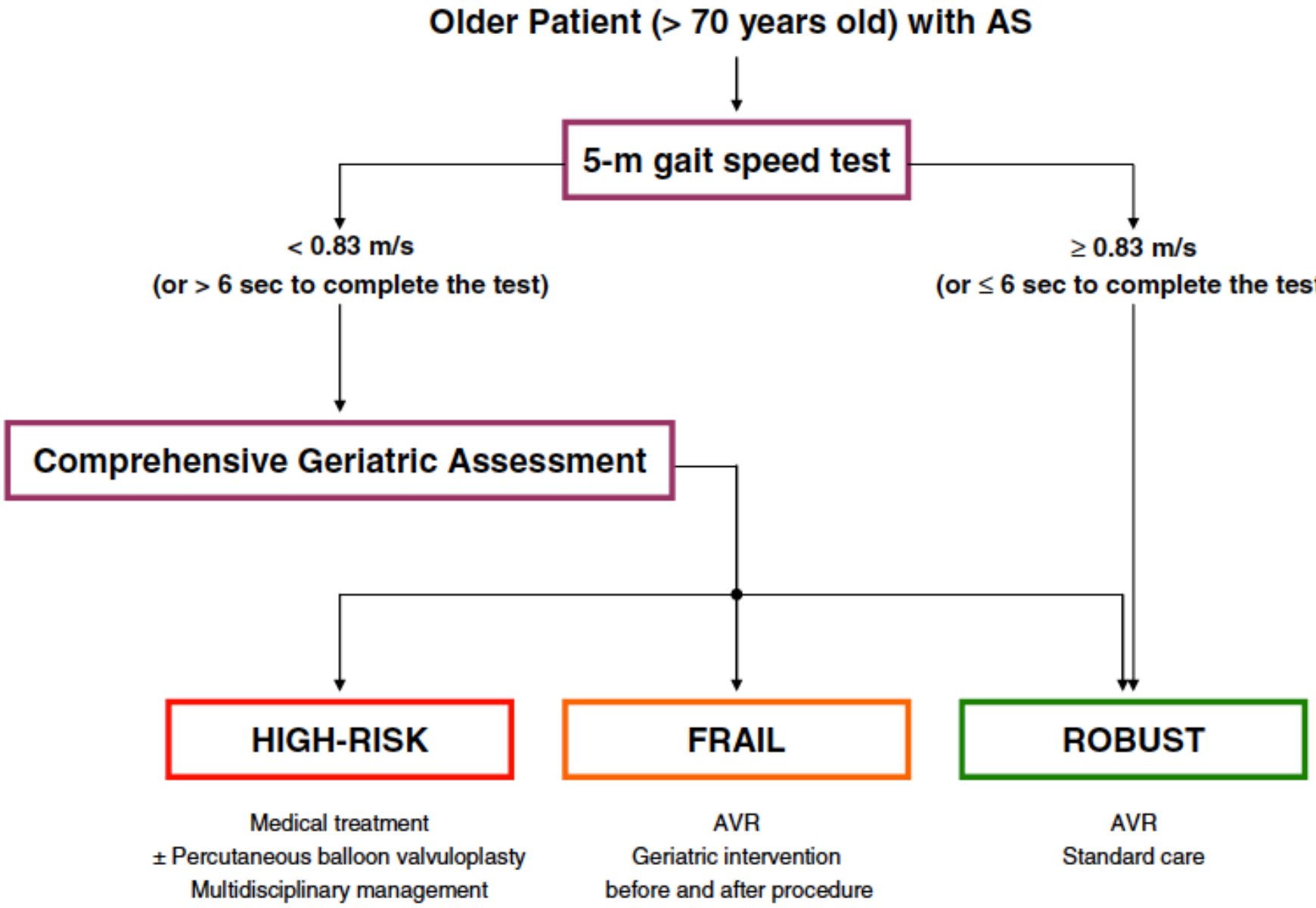
ICOPE

Integrated care for older people

Guidance on comprehensive assessment and care pathways

This is a field test version of October 2018. It will be finalized following feedback from experts and field-based partners.

World Health Organization



AS: aortic stenosis; AVR: aortic valve replacement

Lilamand M et al. *Int J Cardiol* 2014;173:580-2

Courtesy of Nicolas Martinez Velilla

Cambridge University Hospitals NHS
NHS Foundation Trust

"You don't have to take your clothes off..."

For people over 80 –
10 days in a bed ages muscles by 10 years

One week of bed-rest results in 10% muscle loss

Loss of strength could make the difference between dependence and independence

Get dressed – Get moving!

#endPJparalysis

Addenbricks

Produced by the CUH Corporate Communications Team

Addenbrooke's Hospital | Rosie Hospital

Excellent care with compassion

NHS
Lancashire Teaching Hospitals
NHS Foundation Trust

End PJ paralysis

Wearing pyjamas longer than you need to can make you feel vulnerable.

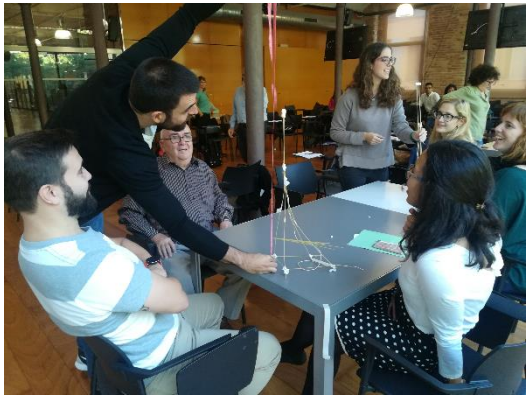
Being mobile helps you recover more quickly from illness and injury.

So we'll be encouraging you to get out of bed when you're well enough, get out of those PJs, and get moving.

On Friday 24th March

our staff are wearing PJs to understand how it feels to be a patient.

#endPJparalysis



Contents lists available at ScienceDirect

European Journal of Internal Medicine

journal homepage: www.elsevier.com/locate/ejim

Original Article

Integrated primary and geriatric care for frail older adults in the community: Implementation of a complex intervention into real life

Marco Inzitari[a,b,*], Laura Mónica Pérez[a], M. Belén Enfedaque[c], Luís Soto[a], Francisco Díaz[c,d], Neus Gual[a,b], Elisabeth Martín[c], Francesc Orfila[c,e], Paola Mulero[f], Rafael Ruiz[c], Matteo Cesari[g,h]

Institut Català de la Salut
Àmbit d'Atenció Primària
Barcelona Ciutat

+PrimàriaBCN

Parc Sanitari
Pere Virgili

+ÀgilBCN

Atenció primària i Geriatria Integrades amb visió Longitudinal

Conclusioni

L’invecchiamento è un fenomeno che produce effetti estremamente eterogenei nelle persone

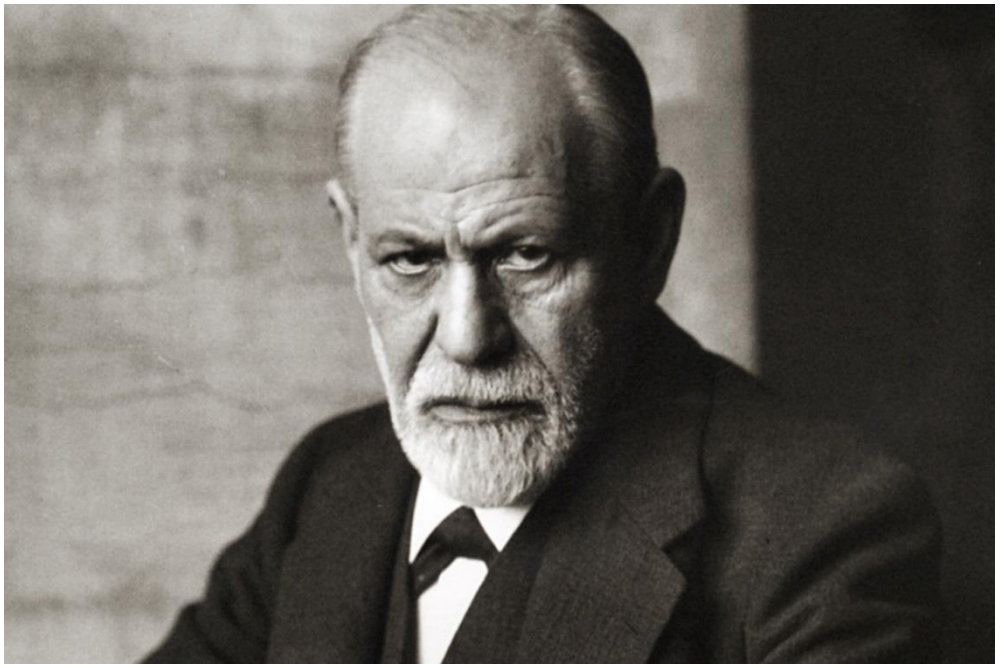
Gli odierni sistemi sanitari (basati sull’approccio alla malattia e/o trainati dal concetto di età cronologica) sono inadeguati ad affrontare la complessità delle persone con età biologica avanzata

Necessità di muoversi verso modelli preventivi e di cura basati sulle capacità funzionali della persona e sull’integrazione dei servizi

Difficoltà legate alla metodologia della ricerca scientifica, tendenza alla medicalizzazione, *ageism*

Non si muore perché ci si ammala, ma ci si ammala perché fondamentalmente bisogna morire

Sigmund Freud (1856-1939)



Grazie!

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