

Healthcare as an investment, from cost to social efficiency

The First 1000 days of Life

A proposal to diminish NCDs and to sustain Healthcare systems

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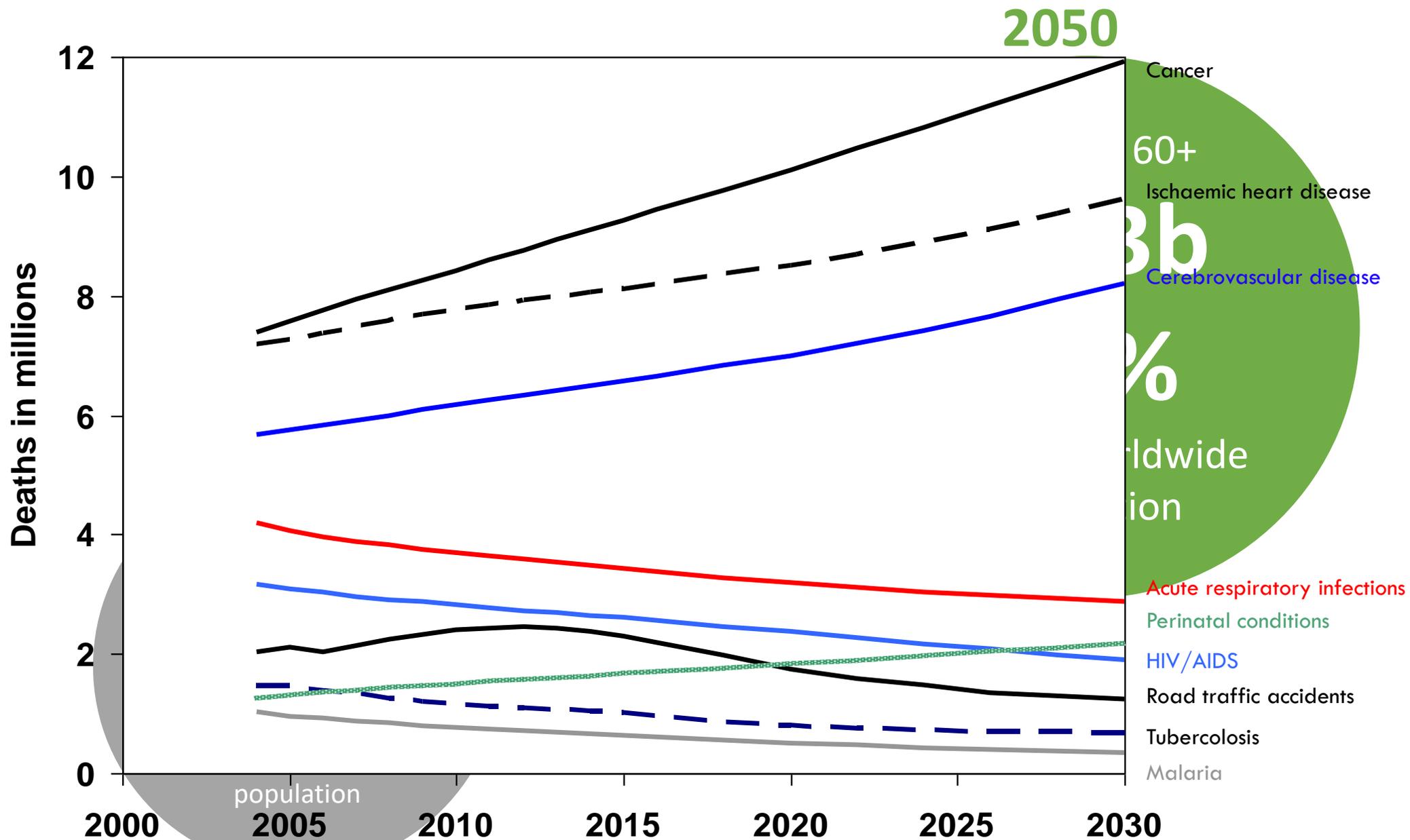
Introduction

- Ageing population and technological advancement are generating a change in the perception of health
- Standard of care will be progressively substituted by individualized medicine, more focused on physical/mental wellness preservation
- Also Clinical Trials are being transformed by hyper-connectivity and evolved social needs, leading to a more aware participation of patients (patients as partners)

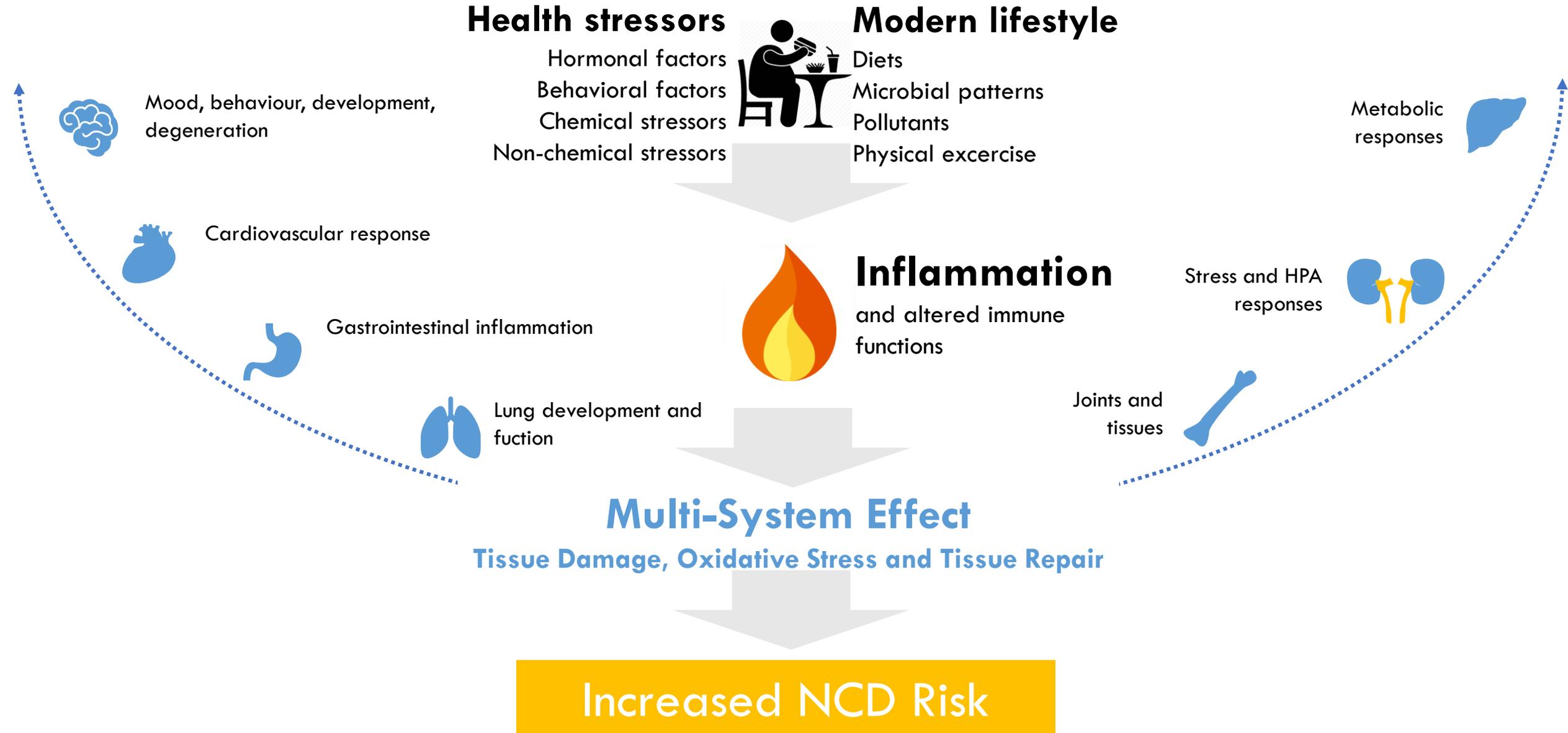
Introduction

- Innovative treatments are expected to dramatically improve clinical outcomes but raise economic sustainability issues
- Rational use of resources pushes the implementation of cost-effective approaches oriented on **prevention and early diagnosis**
- Research, as pillar of cultural, social and medical advancements, needs the continuous support by all component of civil society

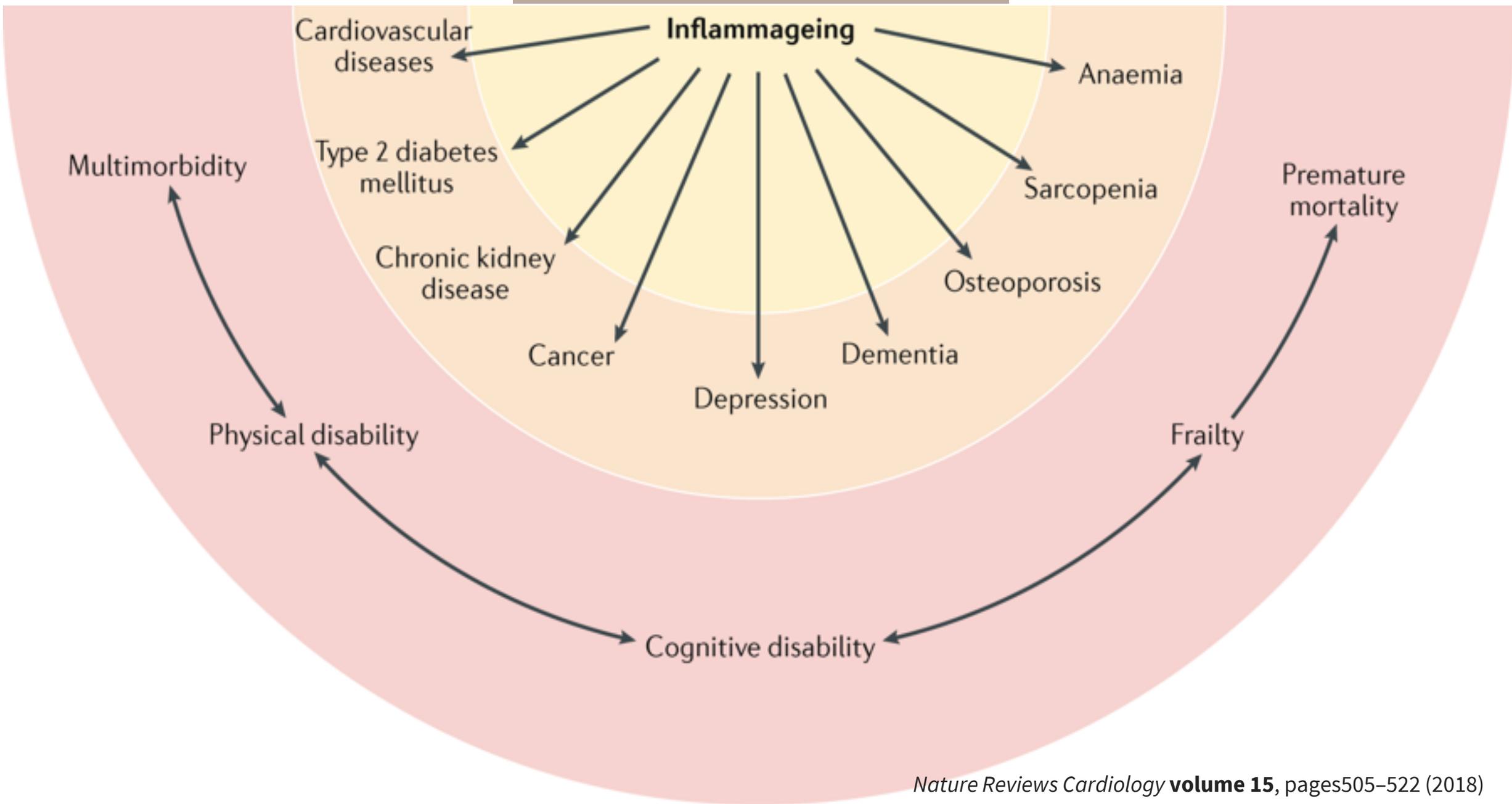
Aging population and chronic diseases rise



Lifestyle-Caused Inflammation as Driver of NCDs

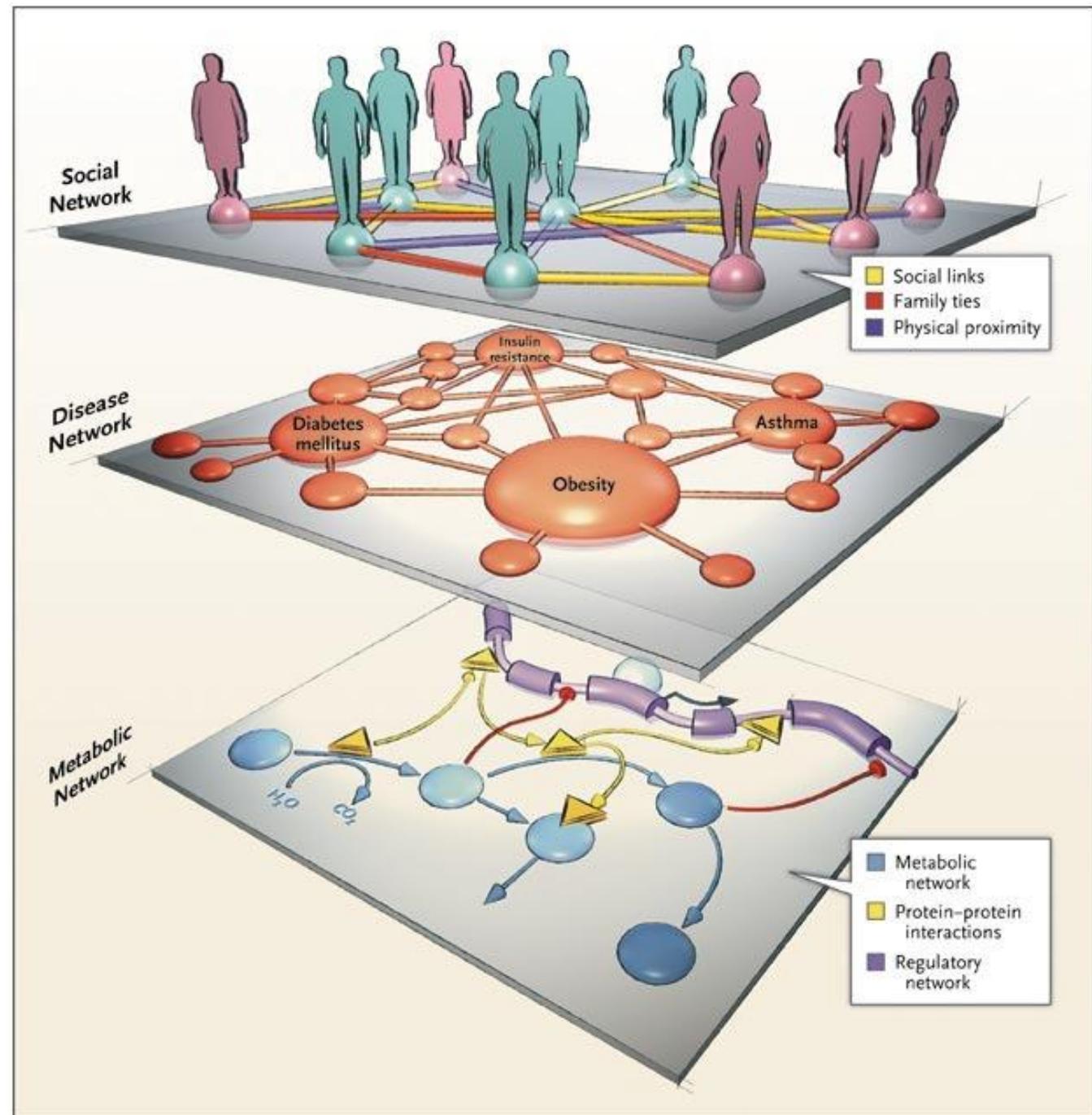


Inflammageing



Network Medicine:

A System of
Integrated Complex
Networks

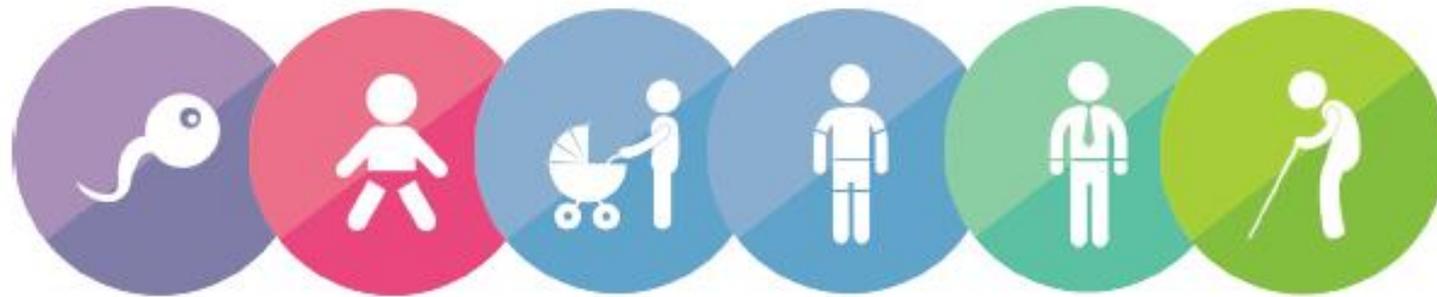


Future Sustainability of the Healthcare System

Develop an integrated care model that helps to predict and prevent diseases, preserving the physical and mental wellbeing of individuals at different stages in life

Focus on Early Stages

Prevention and prediction of NCDs implemented in the pre-conceptual phase, during pregnancy and in early childhood are more effective in reducing morbidity, by helping to decrease and/or postpone the use of any medical treatment

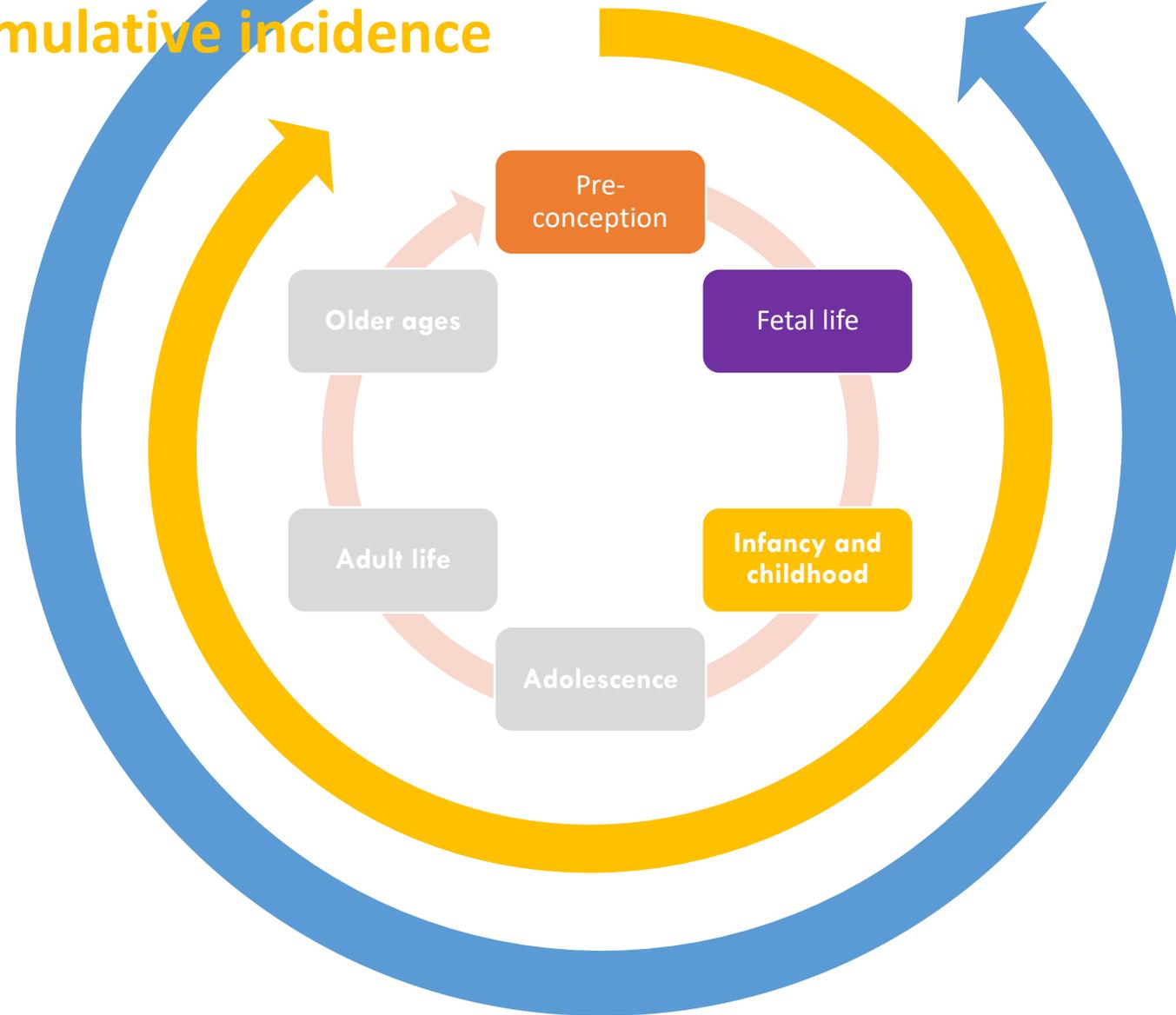


Act early to age better



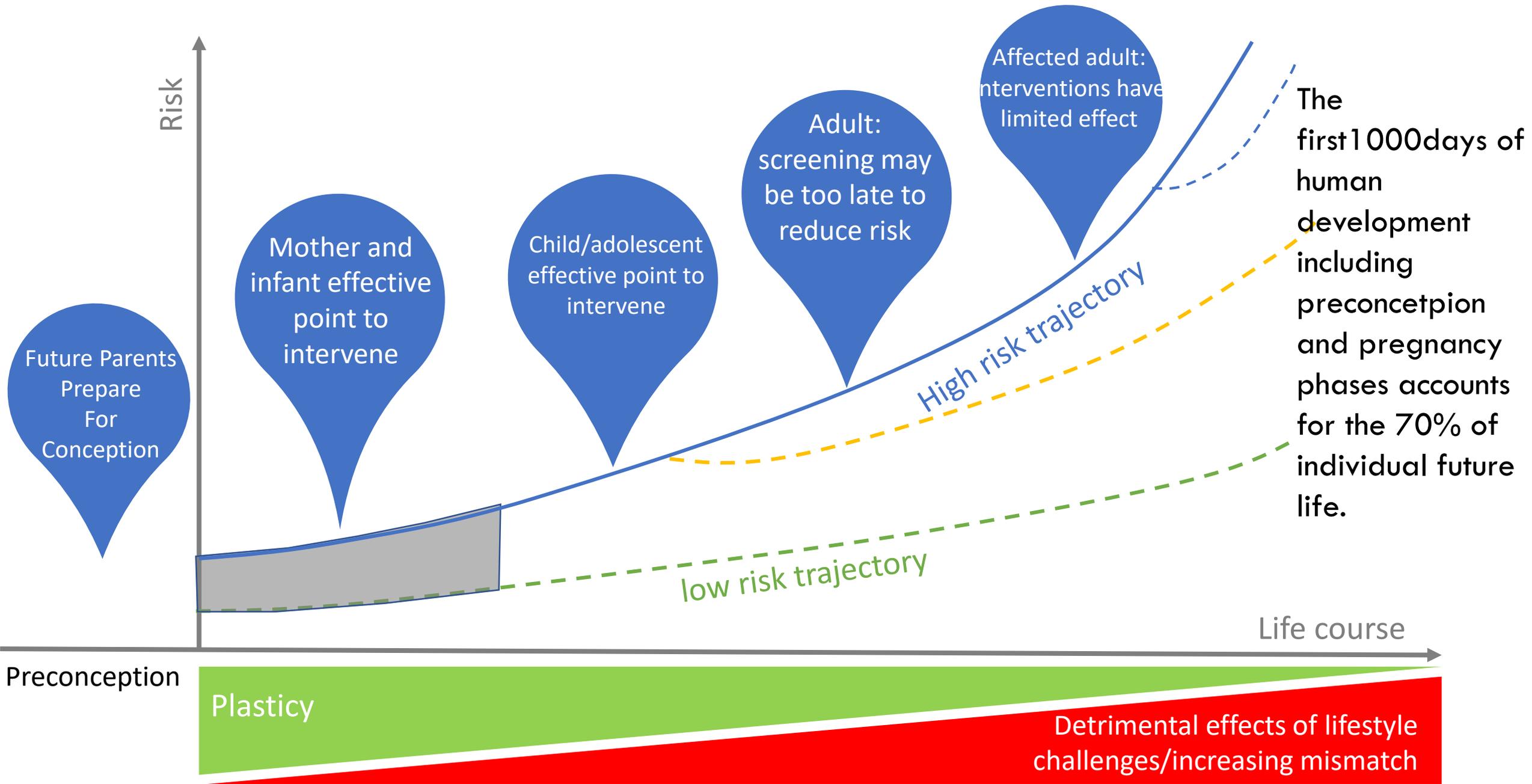
Preventable risk

Cumulative incidence

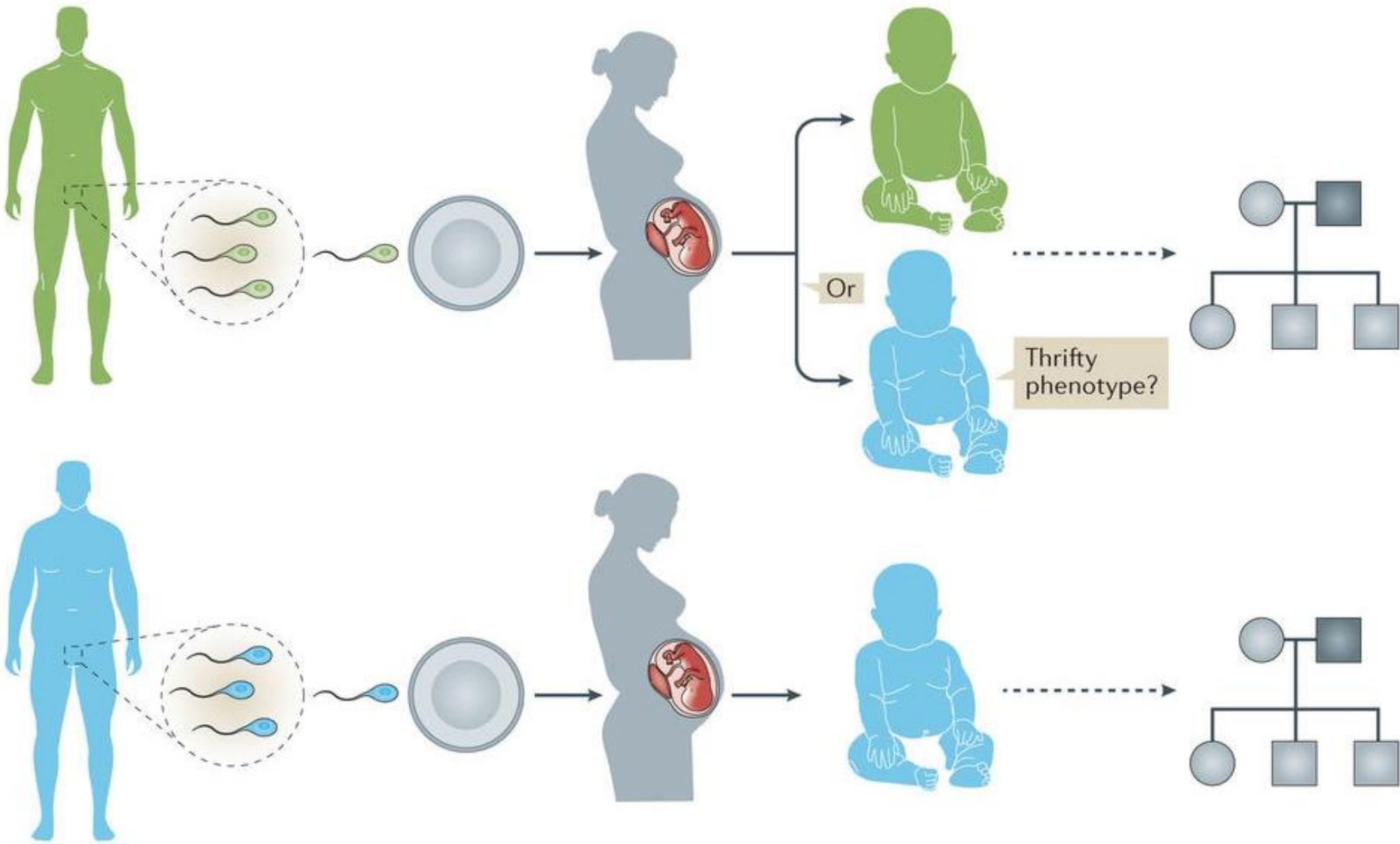


**Chronic
Disease
Prevention:
a life course
approach**

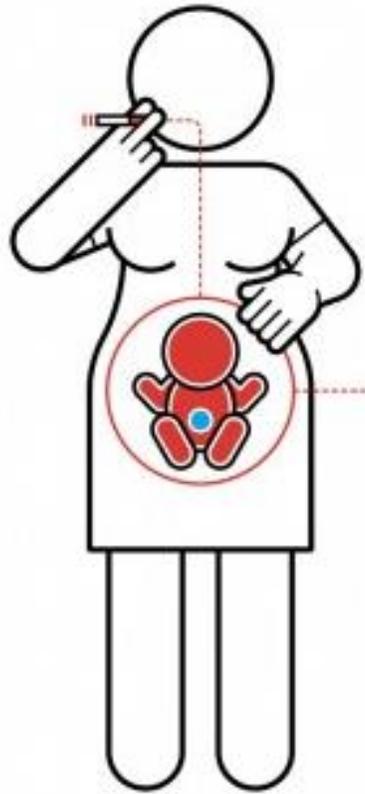
1000 days in a lifetime



Putative effects of exercise and obesity on the predisposition to metabolic diseases



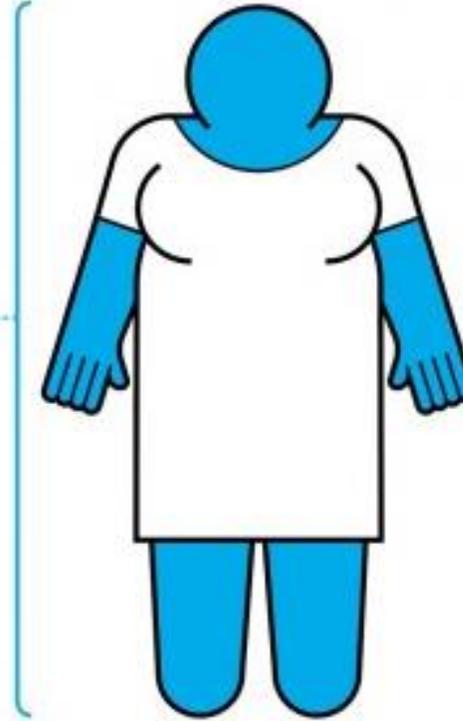
The epigenetic inheritance



I Generation



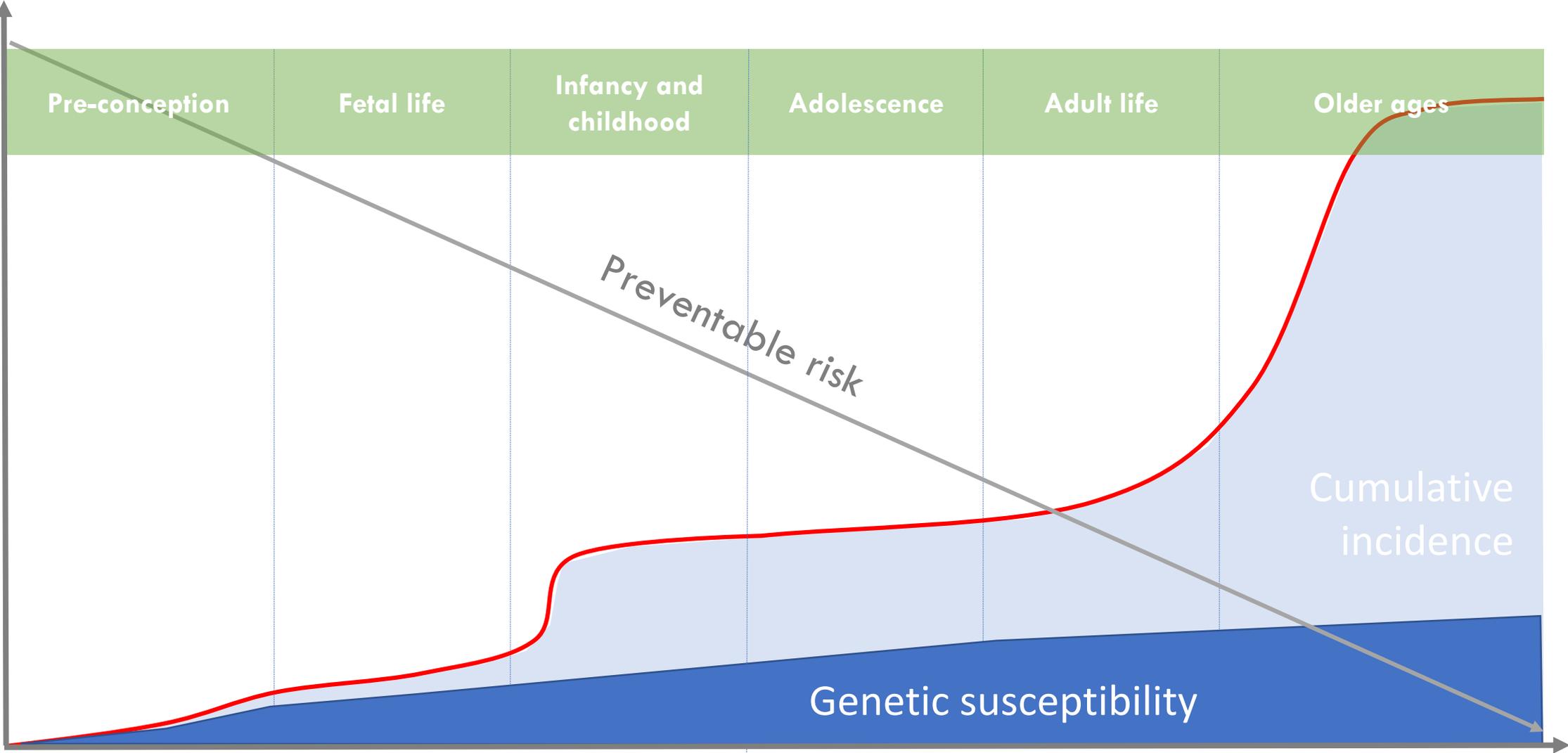
II Generation



III Generation

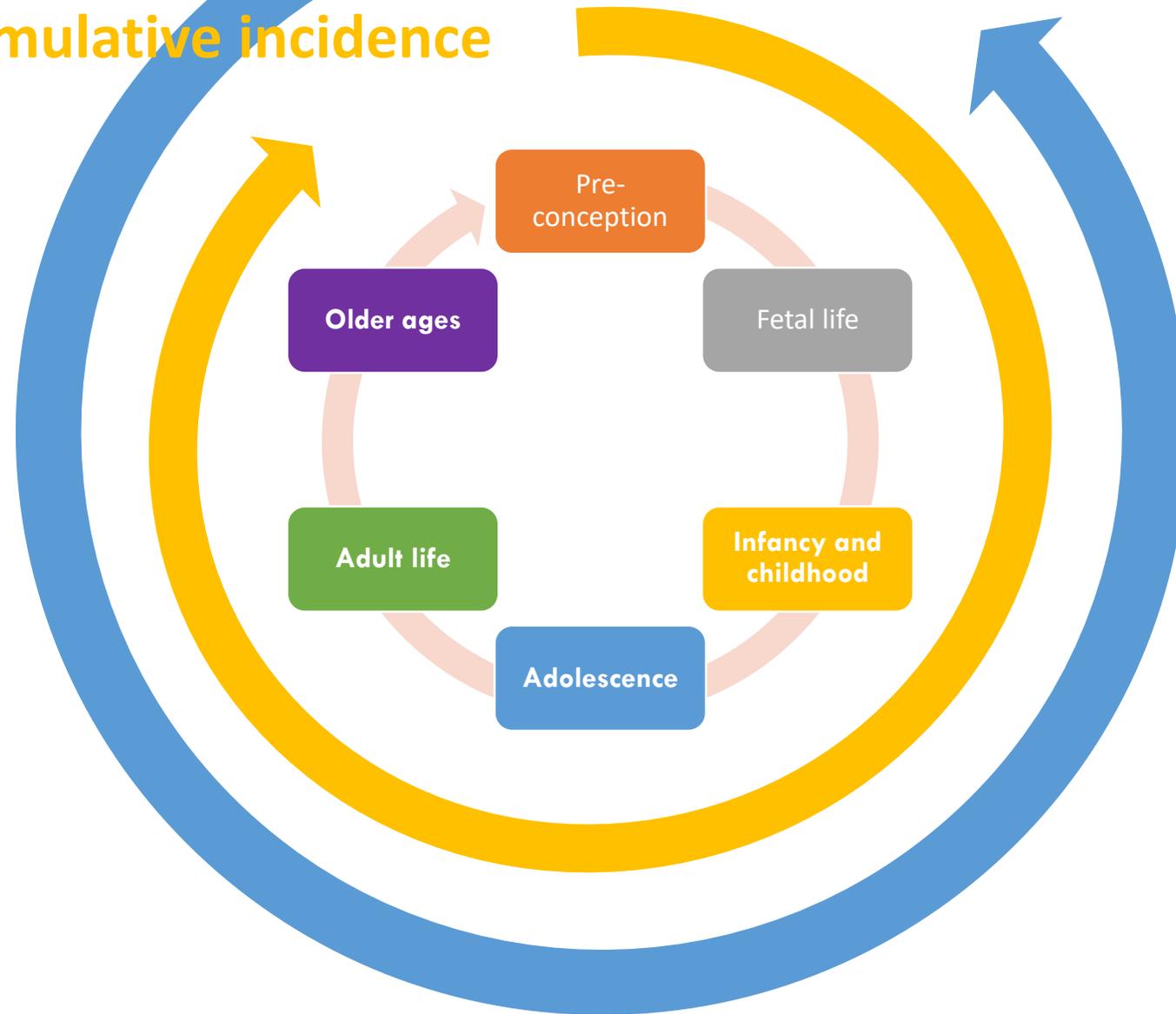
Wellness lifestyles (especially exercise training) have the potential to modify the epigenome of human reproductive cells and could have an unprecedented affect on the health of future generations influencing offspring health and disease risk.

Chronic disease prevention: a life course approach



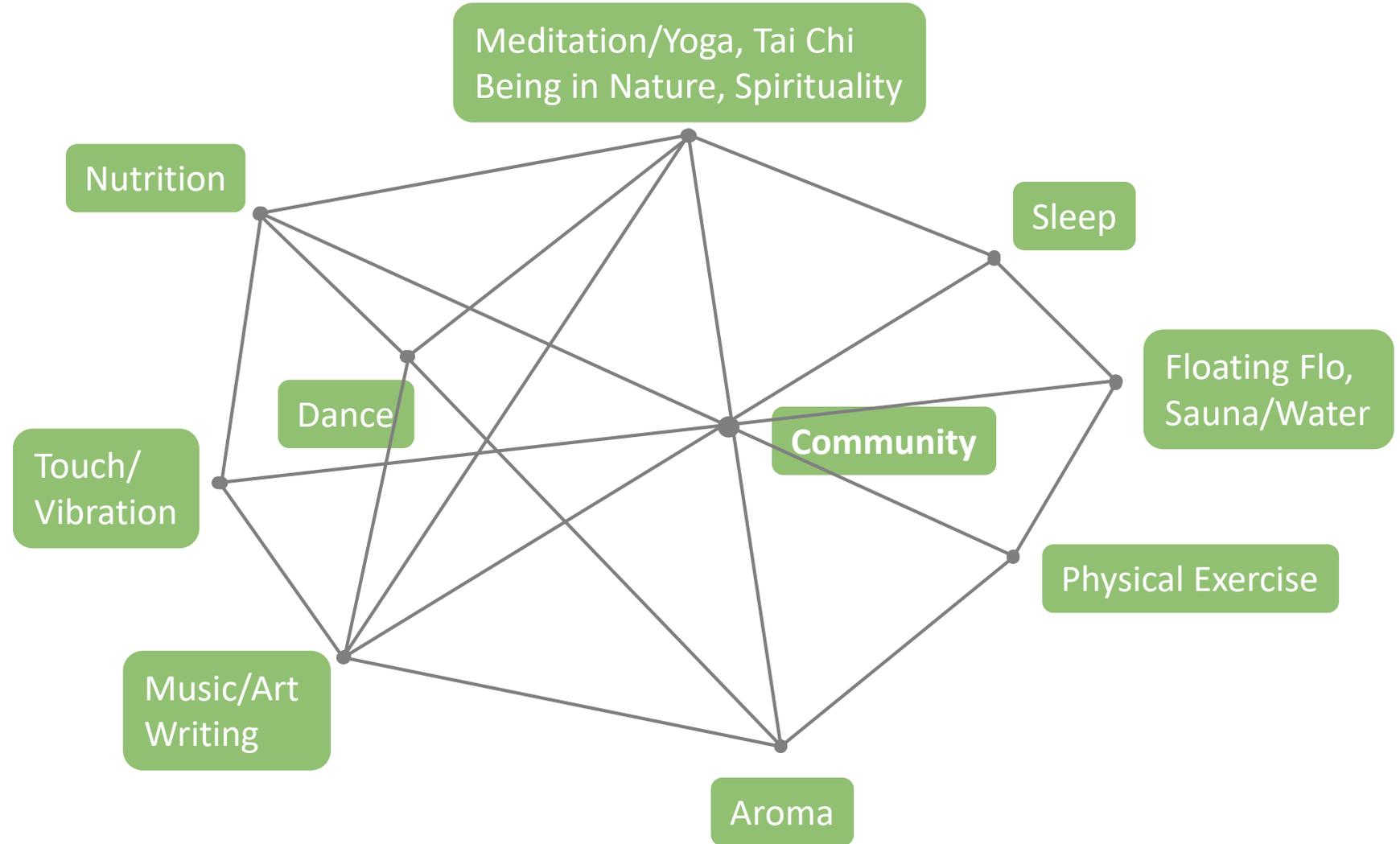
Preventable risk

Cumulative incidence



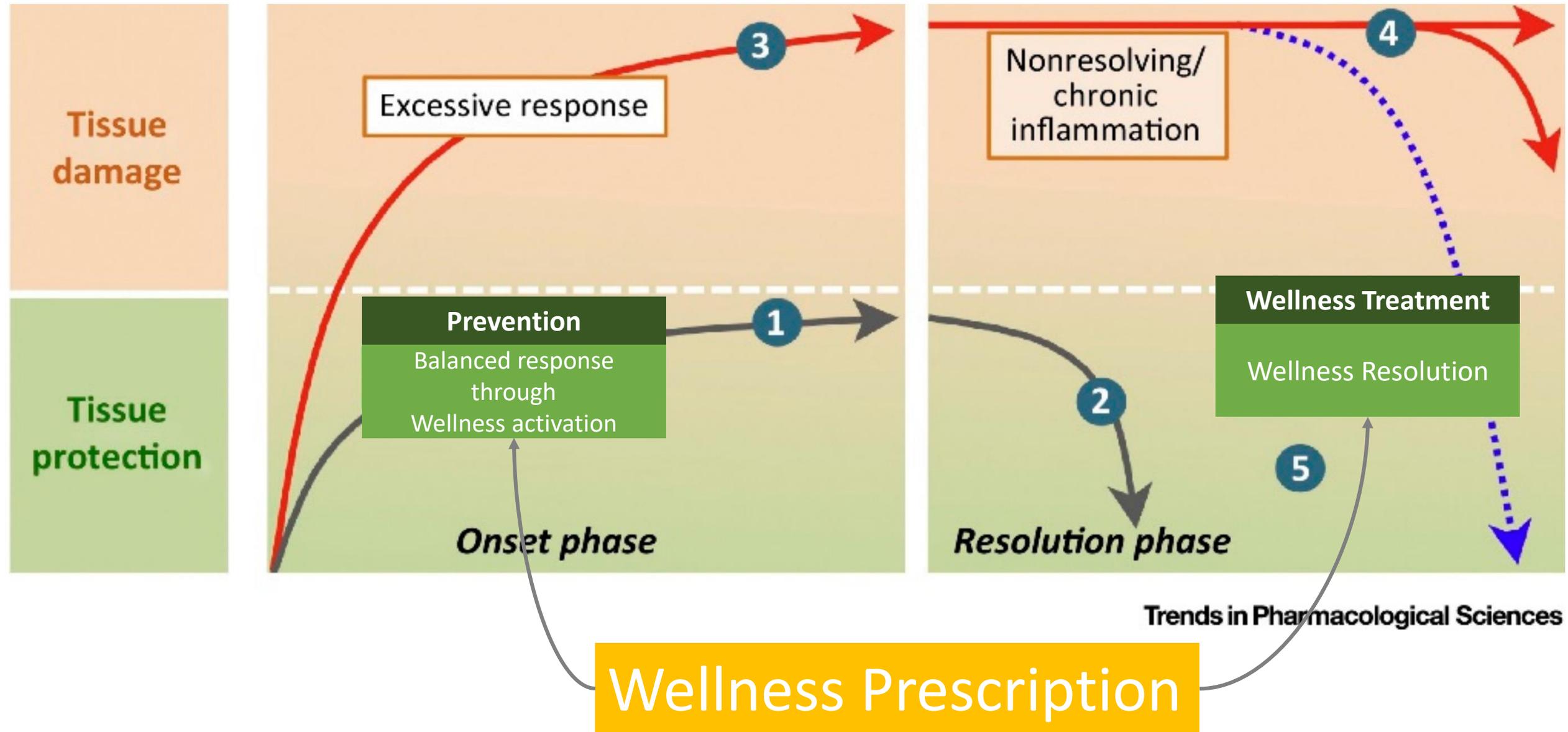
First 1000days
prevention of
chronic disease
continues
throughout the
lifespan

The Network Wellness



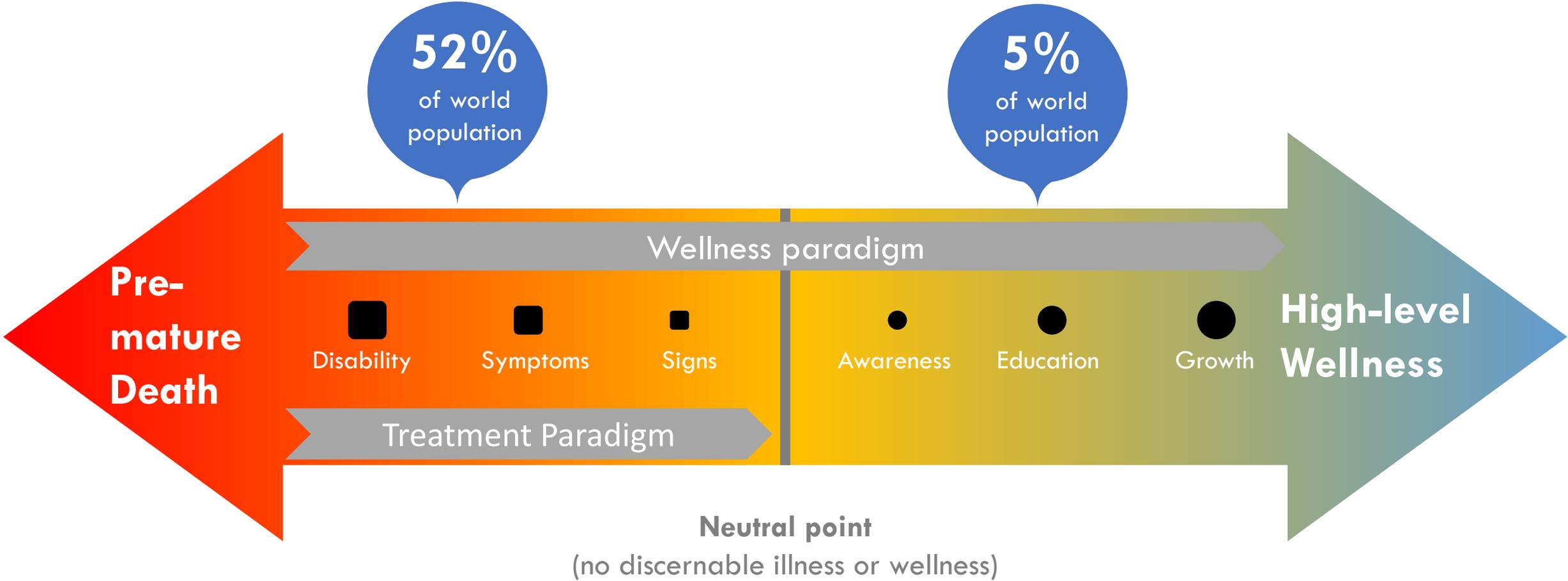
The anti-inflammatory systemic effect of the wellness network

Wellness as a prescription to protect tissues and resolve chronic inflammation



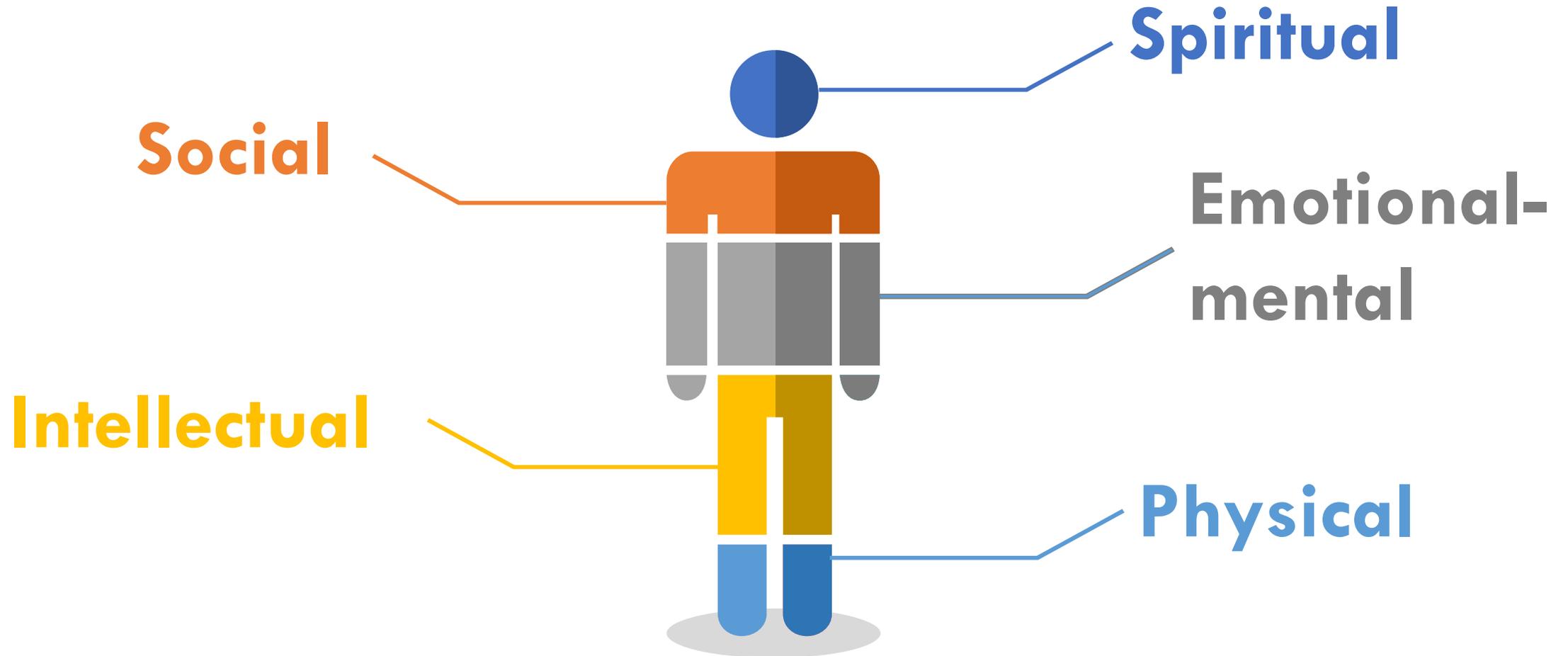
Illness-Wellness Continuum

“Wellness educates for healthy lifestyles and promotes prevention.”

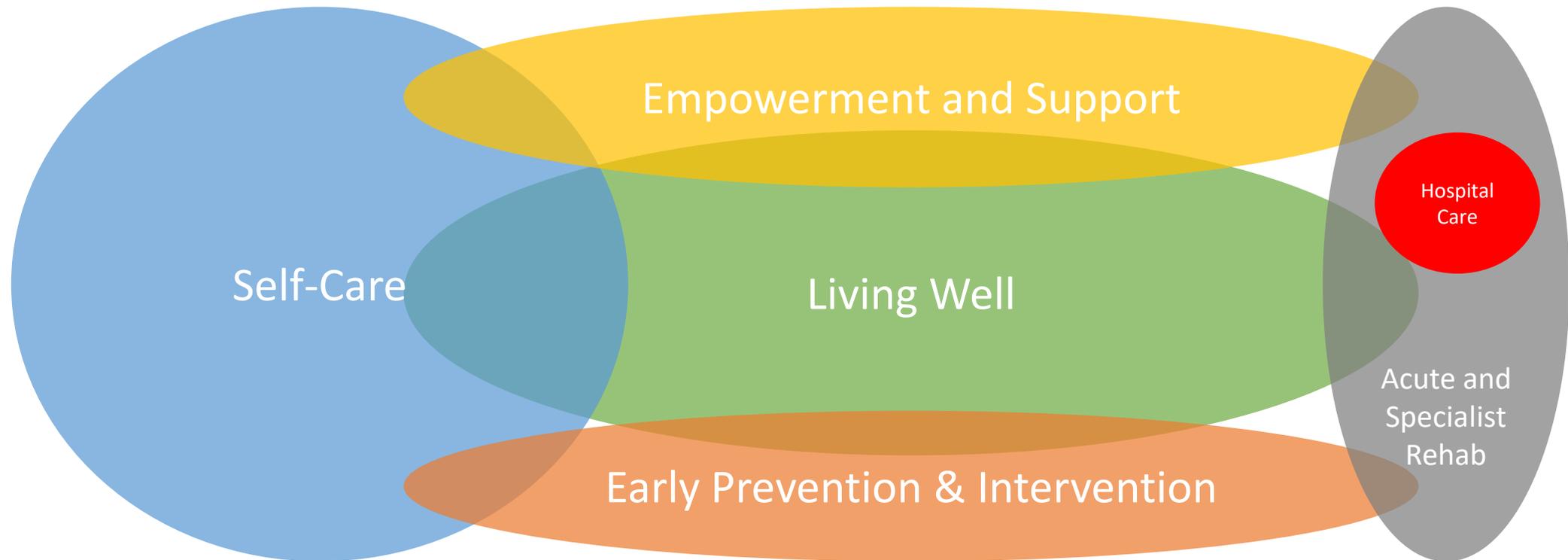


Dimension of Health and Wellness

Health and Wellness are a Multi-dimensional Entangled Universe



Future Sustainability of the Healthcare System



Key take-aways (1)

- Current society urgently needs to establish a comprehensive and integrated system approach to tackle burden of chronic disease
- The UN General Assembly adopted by acclamation a political declaration mobilizing accelerated effort to address non-communicable diseases (NCDs) on September 27, 2018:

"Time to Deliver: Accelerating our response to address NCDs for the health and well-being of present and future generations"

Key take-aways (2)

The First 1000 days: A Matrix for our Lifespan

- Starting from **Preconception to First 1000 days** and following adolescence to adulthood (**First 8000 days**) through the whole span of life healthy lifestyles and personalized wellness approach may prevent the use of painful and expensive cures
- The concept of **Network Wellness** is new and must be integrated with the concept of Network Medicine
- **Precision Wellness** represents the most cost-effective model to safeguard public health as well as a great ethical business

Precision Wellness is the vaccine to Chronic Diseases

Take Home messages

Sound scientific evidence proves that **wellness (lifestyles and behaviors)** plays a key role in population's health in synergy with the traditional medical paradigm



Children's wellness (pre-conception and the first 1 000 days) represents a critical period to prevent Non Communicable Diseases and to enhance the **individual mindfulness** for the rest of the lifespan



Health and wellness professionals should promote and apply the **educational role of wellness** for primary and secondary prevention in shaping the new prevention paradigm and ensure the sustainability of the Healthcare systems.



Thank you!



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